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THE STRATEGY OF SOCIAL DEVELOPMENT PLANNING FOR TAMILNADU

SOME ECONOMIC FACETS OF SOCIAL JUSTICE

79, SECOND MAIN ROAD, GANDHINAGAR, ADYAR,
MADRAS-600 020.

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EDITORIAL—SOME HIGH LIGHTS

I General Economic Scene

State:

Monsoon and Floods: The North East monsoon which started in late October, caused severe floods twice in November in parts of the state. The first one was in early November when as a result of heavy and continuous rains and the following land silps and house collapses, 124 people were killed in Nilgiris and 25 in other Southern districts. The Coonoor-Ooty road was blocked and over 35,000 rendered homeless. In Kumbakonam and Mayuram 1.3 lakh acres of samba and 15,000 lakh acres of thaladi crops were submerged owing to breaches in canals. In Coimbatore, Kanyakumari, Tiruchirapalli and South Arcot districts there were extensive damage to cattle, crops and houses and the state organised food relief to all these areas for displaced persons alongside of distribution of dhotis, saris and blankets. The flood damage was being assessed, in Nilgiris alone the estimate was Rs. 15 crores and the state Finance minister visited Delhi to arrange for Union assistance for relief and rehabilitation to the flood-hit areas, particularly the Nilgiris. A Union team headed by the joint secretary, Ministry of Agriculture was visiting the state from November 24 and planned to submit its report on November 29. A detailed blue print was developed to deal with floods in Madras city which involves (a) setting up of an integrated aid unit to undertake rescue and relief operations in each of the 13 circles of the city corporation, (b) the four mid-day meal centres preparing 60,000 school children lunch plus the 10 community centres to be used to prepere food for flood victims, (c) the Adyar and Cooum rivers were cleared to receive additional water and the water level at Chambarambakkam, Red Hills and Poondi are being monitored, (d) the city's storm water drains were cleaned to ensure free flow of rain water, (e) the city police and civil defence and fire services to be on continuous patrol duty and (f) the Madras city water supply and sewarege board and with its 28 lorries to be used to supply water and voluntary agencies to provide flood relief. Even as the people and the state were recovering from the first flood, in late November a second spell of wind and rains hit the state accompanied by a storm which crossed over from Sri Lanka to Rameswaram and Pamban, but because of the precautionary and safety measures taken by the

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government, there was less damage. The districts of Thanjavur, Kanyakumari, Ramanathapuram, Nilgiris and Madurai experienced heavy rains and floods. In a first report, Ramanathapuram, Thanjavur and Madurai districts report loss of 11 lives and loss of houses by hundreds of families. The Nilgiris again suffered extensive damage, the Coonoor municipal market being washed away and 1,200 persons rendered homeless. Because people had been evacuated from Tuticorin in the South to Nagapattinam in the North from the low lying coastal area, the damage was mainly to cattle, crops and houses. Rameswaram and Pamban bore the brunt of the tidal waves. Again the roads to and from Ooty to Gudalur and Lovedale were affected and power supply to the Nilgiris affected by the break in power lines. Of the 80 disaster shelters that are needed on the 400 mile coast line at the rate of 1 for every 5 miles (see Vol VIII p 66), the first shelter was opened in early November at Nagapattinam and the second at Mimisal at the end of November. Sites for 37 shelters have been chosen and are being constructed with matching help from the Red Cross.

Power: The power situation in November in the state was normal. The maximum generation, without Neyveli, of 5,620 MU were generated in 1977-78, with Ennore reaching 440 MW against its installed capacity of 450 MW. Also Kerala's supply of 1,590 MU during the year was five times its normal supply of of 200 to 300 MU, with Andhra Pradesh supplying 10 MU a month. Andhra Pradesh has agreed to supply 10 to 14 MU per month to MALCO and in return the company will supply 400 tonnes electric conductor grade aluminium and a further 100 tonnes of aluminium products to Andhra Pradesh State Electricity Board. In addition Tamil Nadu would get from the Ramagundam Super Thermal Station 240 MW from 1983 which was inaugurated in mid November by the Prime Minister. The State government is also ensuring the expeditious execution of new power projects—Tuticorin by December end, Neyveli expansion and Kalpakkam. The State Board has offered an incentive to heavy power consumers, especially the high tension ones to opt for non-peak powersupply, with a higher tariff for power made available during peak hours, which will also stabilise the grid fluctuations. Also as an incentive for prompt payment of bills, the Board is reducing the quantum of security deposit for high tension consumers. A new demand on the Board was that on behalf of rural industries who want supply even if there are not the minimum of 10 units in an area, so that this unremunerative supply would speed rural industrialisation. The Board is also continuing its negotiations with an American Company for exploitation or sea water for power generation. About 10,000 MW, it is reported, can be generated through a process based on the temperature difference between sea water surface and that at a depth of 4,000 feet. The Southern Regional Electricity Board which was the first one to commence integrated regional operation of the southern states power systems in Bangalore also became the first in the country to establish from mid November a permanent load despatch centre. The Regional Controller will now control the inter-regional tie line flows with the neighbouring Western region and maintain a system frequency on a single area basis. The movement imbalance between generation and demand in the region and the resulting deviations in

frequency are noticed, they will be corrected automatically by the higher or lower control signals emanating from the Bangalore despatch centre, and by acting simultaneously at Sharavathy in Karnataka, Sabarigiri in Kerala and Kundah in Tamil Nadu, to start with and at other regulating stations in time.

For the country as a whole, the overall power supply position during November was also improved and according to the Union government report, most of the power cuts in the states were lifted or relaxed. This however is contradicted by the actual situation. Total energy generation was on target at 50,589 million Kwh during the period April to September, with hydel units generating 23,274 million Kwh (against last year's 17,377 million Kwh) and the target of 21,061 million Kwh. The northern region recorded a 24 per cent improved performance but faced serious shortfalls. Most of the Northern states are likely to face a power shortage in the coming six months, forcing the Electricity Boards to restrict use of power during peak hours. Uttar Pradesh faces a shortage of 610 to 746 MW which might be relieved a little after February when the thermal units at Paniput, Bhatinda and Obra are commissioned. In Punjab the shortage is between 129 MW and 299 MW, in Delhi 86 MW and in Haryana around 101 to 170 MW during the next 6 months. The Southern region generated 19 per cent more. The Western region continued its power cuts, as its increased generation of 9 per cent was overtaken by a 6 per cent increase in demand. The North-East region also maintained its cuts of 10 to 25 per cent. The Maharashtra State Electricity Board has proposed a Rs. 2,200 crore plan for power expansion over the next 5 years, including an outlay of Rs. 300 crores to provide electrification to the remaining 14,000 villages out of a total of 36,000 and meeting the annual shortfall of 500 MW within a 2 year period. In this connection, it is reported, that although every year an additional 2000 MW generating capacity is created, the total power actually available in the country remains the same due to poor maintenance of plants and equipment. As a result some of the power plants are operating at 50 per cent capacity and this surely is the first area where remedial action is needed and can be taken. India's first magneto-hydro dynamics (MHD) power generation system at Tiruchirapalli will be ready in the early eighties, the government reports. India's large reserves of coal are not of a superior quality and its economical gasification involves a complex process and is being developed at the Tiruchirapalli Centre. For ordinary commercial purposes, MHD with capacities above 300 MW will be economical, it is reported.

Water: As a result of the very heavy rains in November almost all reservoirs in the state are full. Mettur was at its full 120 feet level, Papanasam was 121.06 feet, Manimuthar 89.82 feet. Vizayanarayanam was overflowing and the 1,500 tanks in North Arcot had more than a month's supply of water, Sathanur was at 105.5 feet and the Madras city reservoirs also received plentiful water—Red Hills at 12.62 metres against the full level of 14.6 metres, Cholavaram at 17.02 metres against the full level of 19.7 metres and Poondi at 38.25 metres against 42.1 metres. The Madras Metropolitan Water Supply and Sewerage Board set up in November 40 depots with the staff to attend to complaints of water supply,

leakage at choked drains and provide the repair and rectification work and new connections. The depots function under a Central Complaint Cell which analyses all the complaints and undertakes fuller investigation where necessary. The State government formulated in late November to the Union and Kerala governments specific proposals on the utilisation of the waters of west flowing rivers which will irrigate 5 lakhs acres in the districts of Madurai, Tirunelveli, Ramanathapuram, Kanyakumari and part of Coimbatore, involving the tapping of 50 tmc feet of water from these rivers out of the total of 2,500 tmc feet of water which flow from there into the sea. The project calls for the erection of a number of reservoirs at different points and tunnels to link them, the entire cost of several crores being borne by the Tamil Nadu government.

Urban Development: The Madras Corporation is executing a Rs. 5 crore scheme to provide basic amenities to extended areas which have been merged in the city. To date Rs. 1 crore has been expended in the provision of roads and sewerage to these new panchayat areas. In association with the Slum Clearance Board, Rs. 6 crores are being spent in improving water, light, pathways and other amenities in the city slums.

Transport: As part of the All India dock workers strike, work in Madras port was affected in the third week of November. Except for the unloading of kerosene oil from a ship in the mechanised Bharathi Dock and loading of iron-ore at the rate of 34,000 tonnes a day (to be increased to 50,000 tonnes), work in the dock was at a stand still. A week later the port authorities claimed that the port was earning its normal Rs. 11 lakhs a day (after falling to Rs. 3 lakhs on the first day of the strike) and landed general cargo from 3 vessels. Of 43,572 tonnes of cargo handled on that day, crude oil accounted for 42,000 tonnes. Bombay port had been most seriously affected and as expected the government and the unions concerned reached an agreement on their demands which were mainly to implement earlier agreements and so settled the 11 days strike at the end of the month. The state's road programme requires an expenditure of Rs. 23 crores for the improvement and maintenance of motorable roads, and additional funds are needed for laying new roads and improving and developing the panchayat union roads. The state budget provides Rs. 9 crores and the Union government has been requested to provide the additional needed aid. The government has under study a proposal to introduce mini buses in the congested areas of George Town along with the streamlining of the traffic flow, making some roads one way routes. Mini buses can then use cross roads and meet the growing transport needs of this busy commercial area. The Members of Parliament from all parties joined together and obtained from the Union government an assurance that the scheme for a new railway line from Karur to Madurai via Dingidul and a study of the conversion of the existing metre gauge into a broad gauge from Madras to Tuticorin will be undertaken, as this is vital for the agricultural and industrial development of the state and for the avoidance of heavy losses due to the transhipment from the metre to the broad gauge and vice versa at 12 transhipment points. The state government has also submitted to the Union government a Rs. 560 lakh master plan for improving the Buckingham canal and making it navigable. The plan

provides for dredging and lining the canal, strengthening its bunds over the 160 KM within the state—out of a total length of 416 KM running into neighbouring Andhra Pradesh.

Welfare : The government is launching a Rs. 1 crore welfare programme for dispersed tribal groups in Chingleput district. The 35,000 Irulas who do not come under the tribal sub-Plan because they are scattered all over the district and do not constitute more than 50 per cent of the population in any locality will be organised into cooperatives as dairy men and for forestry based industrial activities. Also support programmes will include distribution of pattas and land, provision for water supply, link roads, medical facilities, residential schools and balwadis. The first residential school for them has been started at Kodungaiyur. The government is also introducing two bills in the next session of the legislature—one to prevent alienation of lands belonging to hill tribes and another to give them relief from debts. A survey is now being completed to identify the transfer of lands owned by tribals over the last 30 years and to establish the extent of their indebtedness. The draft bills are now with the Union government for their advise and are part of the Rs. 200 lakhs for hill tribes development during the current year. The Union Minorities Commission has recommended to the state government the grant of financial aid to victims of the August communal riots at Pernambut. The government reports that as a result of the Ordinance reported in the last issue (see p. 633), illicit distillation and transport of liquor have been curtailed to a significant extent. During the three months August to October, illicit distillation cases declined from 5,896 in August to 2,035 in October, bootlegging from 2,748 in August to 503 in October and arrests from 17,000 persons in August to 5,000 persons in October. The stricter enforcement of the law has led to increase in the reported cases of drunkeness from 4,542 in August to 6,251 in October. A prohibition enforcement squad has been set up at the state borders and two regional laboratories on excise are being established in addition to the one at Salem.

National :

Seventh Finance Commission : The report of the Seventh Finance Commission was published at the end of May and the Union government accepted its recommendations except on two points. Further important progress was made in the devolution of tax resources to the state. 85 per cent in place of 80 per cent of VI Commission of the income tax revenue, 40 per cent in place of 20 per cent of the VI Commission of the proceeds of the Union excise duties, all of the proceeds of the Union excise duty on generation of electricity, the entire proceeds from state duties other than on agricultural land are recommended and accepted. Also the grant in lieu of tax under the Repealed Railway Passenger Fares Act on the basis of passenger earnings instead of VI commission's kilometre basis, Wealth tax on agricultural property on the basis of net collection in each state, a grant of Rs. 1,173 crores to cover the non-revenue plan gap of 8 states, Plans grants for the upgradation of administration have been allocated to the state, totalling in all a transfer of 55 per cent of divisible tax receipts of the Union government and 26 per cent of the total revenue receipts of the Union government and 26 per cent of the total revenue

receipts of the Union government during the 5 year period. The two *recommendations* not accepted were (a) that *actual 100* per cent compensation be paid for the loss of excise revenue to states moving towards prohibition from 1979-80 (this would leave Tamil Nadu and Gujarat completely uncompensated) and (b) that the small saving loans to the states be converted into loans in perpetuity. *Instead the government* intends to pursue its policy of paying 50 per cent compensation to states introducing prohibition on the basis of the revenue raised in 1976-77, and accepting the debt relief scheme of the commission, has also decided not to require any repayment during the period 1979-84 on account of outstanding small savings *loans in order not to disturb the* order of the debt relief recommendations made by the commission. For the total non-plan capital gap of Rs. 3,512 crores, Rs. 2,156 crores are recommended as *debt relief. In regard* to *relief* to states struck by natural calamities, in addition to higher non-plan expenditure allowed to the states for such purposes, an annual *provision of Rs. 100.50 crores has been* made compared to the Rs. 50.71 crores provided by the VI Commission. Also a distinction is made between drought and other calamities. On droughts, the state governments are to make a contribution of 5 per cent of the Annual Plan to be treated as an addition to the Plan and covered by advance plan assistance as at present, and if the expenditure recommended by the Union government team is above this amount, the difference should be made up as non-plan assistance fully, half as grant and half as loan. In regard to floods, cyclone and other calamities, Union assistance should be made available as non-plan grant to the extent of 75 per cent of excess expenditures. The total transfer of resources from the Union government to the states will be Rs. 23,062.77 crores between April 1979 and March 1984, compared to Rs. 9,608.85 crores during the V Plan five year period following the Sixth Finance Commission recommendation. This is the biggest transfer ever and in addition the provisions for meeting droughts, floods and earthquake and other natural calamities are generous. Along with the special grants in aid to meet non-Plan revenue gaps of the backward states, the total result is to leave all states including the heavily populated backward Northern states as well as those in other regions in a position now to plan a fast moving and accelerated development plan. It should not however lead to any diversion of this generous award to non-development purposes nor should it weaken the obligation of states to raise the maximum resources. There is an assumption of *buoyancy of revenues which it is hoped* will come true.

Sixth Plan : With the Seventh Finance Commission's provision of generous and surplus allocations to the states as *explained above, the exercises being undertaken by the Planning Commission* indicate that with the increased resources mobilisation by the states, Plan assistance to them will be smaller. The Gadgil formula is being reviewed also to bring it into line with formula adopted by the Finance Commission which for the Income tax sharing was 90 per cent on the basis of population and 10 per cent on the basis of contribution measured by the annual average net assessment of each state, for the excise duties allocation 25 per cent according to the population, 25 per cent on the basis of the *increase* of per capita State Domestic pro-

duct multiplied by projected population of the state at 1st March 1978,25 per cent on the basis of the poor in each state and 25 per cent on a formula of revenue equalisation worked out by the commission. The Planning Commission in November released its latest computation of those living below the poverty line as being 46.33 per cent in 1977-78 compared to 48.55 per cent in 1976-77 and 55.94 in 1973-74. The Rural poor in 1977-78 was 47.85 per cent compared to 50.22 per cent in 1976-77 and 53.0 per cent in 1973-74. Similarly the urban poor percentage had declined to 40.71 per cent from 42.27 per cent and 44.69 per cent. The Commissions' poverty line is Rs. 61.80 per capita per month for the rural and Rs. 71.3 per capita per month for urban areas, which corresponds to 2,200 calories per person per day in rural and 2,400 calories per person per day in urban areas. It forecasts that the percentage of population below the poverty line will decline to 38 per cent in 1982-83 and 27 per cent in 1987-88 on the basis of the rates of growth planned in the Draft Plan without any redistribution of income. For purposes of framing redistribution policies, the Commission defines abject poverty as those being 75 per cent below the poverty line. On this basis, 26 per cent of the population are poor in 1977-78, declining to 19 per cent in 1982-83, if the planned rates of growth are attained. Thus the main Plan strategy is to execute redistribution policies and programmes so that the above 19 per cent will be moved upto the moderate poverty line in 1982-83. The redistribution policies comprise land and urban property reform, distribution of essential goods to the weaker sections, integrated rural development programme, more progressive wealth and agricultural taxes, levy of capital gains tax on lands, excise duty exemptions to small scale intensive labour production and low income consumption goods, and higher taxes on other goods produced. The Raj Krishna Committee on land reforms has recommended that the 81 land reform laws passed by the states and assented to by the President and all approved laws be included in the ninth schedule to prevent them from court challenges, as at present there are 27,155 writ petitions pending in various high courts, the largest being 11,390 in Karnataka. In fact because of the legal challenges, of the 5.3 million acres declared surplus, only 1.3 million acres have been actually distributed. To deal with the pending cases, it has recommended that Chief Justices name one or two judges to deal exclusively and speedily with all pending cases. A National Information Centre is being set up for developing, managing and operating upto date information continuously from the administrative departments for use by the Planning Commission and ministries. The network is being organised around a giant host computer and a few front end mini computers housed in each one of the departments. This increased computerisation will speed up the flow of statistics and ensure a quick feed back of data required to assess the progress of Plan schemes. A standing Committee chaired by the Secretary of the department of Electronics, will supervise the flow of data from the regional sector data banks and ensure that all data used and required for the annual survey of industries, agriculture, prices, labour etc are quickly processed and made available. The Commission also reports that the modified integrated rural development programme which is to achieve full employment in 1,000 blocks in 3 years and in 2,000 blocks in 5 years has started. All states except Tamil Nadu and Rajashtan have conveyed a

list of selected blocks and Rs. 21.6 crores have been released to the states for the programme. The commission has also started work on revision of the draft plan and is making projection for one year more 1983-84 (as per the rolling Plan concept to be ready by January end.)

Regressive Indian Taxation: An ILO study on Indian taxes on the poor and non-poor in India states that with direct taxes imposed by the Union and state governments being only 4.54 per cent of the country's GNP direct taxes have not reached saturation point, and at that level are not progressive. The rural poor who represent 78.95 per cent of total consumption expenditure pay 70 per cent of total taxes but the rural non-poor who account for 61.39 per cent of total consumption expenditure pay only 26.54 per cent of total taxes. The urban non-poor who account for 38.61 per cent of total consumption expenditure pay 73.46 per cent of the total taxes. Thus the rural non-poor are getting off very lightly compared to the urban non-poor and rural poor in tax payments. In Gujarat, Maharashtra, Tamil Nadu, the tax burden on the urban non-poor crosses the 70 per cent mark, on the rural non-poor it ranges between 27.49 and 27.73 per cent. The urban non-poor pay much more in direct taxes than the rural non-poor—as much as 76 to 72 per cent in Gujarat, Maharashtra, Tamil Nadu, West Bengal, Karnataka, and Jammu and Kashmir. Tax on agriculture income is low at Rs. 39.1 crores in 1971-79 and on estate duty only Rs. 11 crores, which is 0.08 per cent of total tax, down from 0.23 per cent in 1955-56 to 1965-66. This is a tax which has little adverse effect on incentives and is a good redistributive instrument because intergenerational wealth transfers and wealth inequality generally are principal cause of economic inequalities. The poor collection is due to leakages both at tax formulation and administrative stage. What is worse is that the provision for exemptions, deductions and rebates make these taxes—wealth, estate, gift, and agricultural income taxes—regressive in effect. One of the sources of leakage is the conspicuous consumption of business executives whose emoluments are listed under 10 sub-heads. According to the agricultural census, 15 per cent of cultivators own 60 per cent of total operational net cultivated area and their high incomes are untaxed or grossly under taxed. While receipts from income tax of the non-agricultural sector amount to 2.43 per cent of GNP, receipts from agricultural income tax come to 0.14 per cent of GNP. Here is a big leak which must be plugged.

Prices and Anti-inflation : The wholesale price index for October rose by 1 per cent standing at 187.5 at the end of the month. This has converted the minus rate of inflation continuing since February into a positive rate, and marks a rather unusual price movement which ought to fall at this time of the year following the arrival of the kharif crop. In October 1977 for instance the index fell by 1.6 per cent. The prices of cereals fell in October by 0.9 per cent compared to the fall of 2 per cent in October 1977, oil seeds by 4.8 per cent compared to last year's 10.7 per cent and edible oils by 0.4 per cent compared to 10 per cent in October 1977. Pulses increased by 0.1 per cent compared to last year's fall of 1.9 per cent, with similar movements in the prices of fruits, vegetables, milk and spices. Moong and Urad prices rose by 4.3 per cent and 1.6 per cent while in

October 1977 they fell by 6.7 and 8.3 per cent. The foodgrains group as a whole fell 0.6 per cent compared to last year's decline of 2 per cent. Tyres and tubes rose by 8.4 per cent and 4.3 per cent, soda ash by 9 per cent, dry cells by 2.7 per cent. One reason for the price rise in October is that money supply during the year upto November 10, increased by 19 per cent compared to the increase of 8.6 per cent in the comparable period of the previous year, Bank credit increased by Rs. 798 crores compared to the previous year's Rs. 396 crores. In the eight weeks prior to November 17, 1978, the incremental credit deposit ratio increased by 100 per cent compared to the same period in 1977. The RBI took steps at the end of November to curb credit expansion to break the inflationary pressure on the economy. It instructed the banks to so plan their future non-food credit that the incremental gross credit (non-food)—deposit ratio is within 40 per cent for the period December 1, 1978 to March 31, 1979. From March 31, to November 17, 1978 non-food gross bank credit (including cotton and fertilisers credit) expanded by Rs. 1,282 crores against Rs. 283 crores in the corresponding period in 1977. The share of industry was about half and priority sector lending was poor. Now RBI has raised the statutory liquidity ratio to 34 per cent from December 1, (up 1 per cent) which will result in deployment of Rs. 250 crores in cash and approved investments. While refinance facilities for food production, exports and small farmers loans would be available, banks were asked to use them only in case of extreme need. The private banks have been advised to arrive at a maximum lending of 33 1/3 per cent of total advance to the priority sector by March 31, 1980, achieve a credit deposit ratio of 60 per cent, and 1 per cent of total advances under differential rates and 40 per cent of such lending to SC and ST. It is to be hoped that these measures are not too late to cut the inflationary pressure on the economy, which is expected to register a growth rate of 3 to 4 per cent this year—with credit and currency expansion at about 5 to 6 times this amount—and that the priority sector will really benefit from the renewed RBI directives. Returning to the price front, the increase of the procurement price for paddy by Rs. 8 per quintal and the large procurement of paddy by public agencies also limited the price decline of the cereal. The Agricultural Prices Commission's recommendation for an increase of Rs. 2.50 per quintal of wheat and Rs. 15 per quintal of gram will have a similar effect. The increased money with the public is also seen in the tardy increase in direct taxes which was 7 per cent (Rs. 71 crores increase) compared to the 18.3 per cent increase in indirect taxes (Rs. 545 crores increase). On the anti-inflationary side, the Union government reports a broadened scheme of public distribution of essential commodities, with the states, being involved in the selection of the commodities to be distributed and in the reduction of sales taxes on the commodities which comprise wheat, rice, rape seed oil, common clothing, kerosene, soft coke. Every village or a group of villages having a population of 2000 and above will have a fair price shop, which numbers at present 55,694 in urban and 1,85,637 in rural areas, making a total of 2,41,331 shops. (Tamil Nadu with 2,122 in urban and 7,746 in rural areas lags behind all other states except Rajasthan). The government is also moving to immobilise the effect of remittances from abroad on prices. Kerala has

proposed to the Union government that it organise a non-banking financial agency to mop up the deposits from emigrants as lumpsum or cumulative time deposits to be repaid on maturity. This would involve the inflow of Rs. 4,000 crores a year. The state has asked the Union government to give it borrowing powers to tap this source, even allowing such borrowing to be done by the Kerala Electrics Development Corporation for the manufacture of integrated circuits needed by the State Electricity Board which could use Rs. 150 crores immediately. RBI has not accepted the differential rates scheme involving a subsidy of 5 to 6 per cent on loans given to households with less than Rs. 2,000 per annum income in rural and Rs. 3,000 in urban areas. To frame and review policies on Regional Rural Banks following the Dantwala Committee report, RBI has set up a committee headed by the Deputy Governor K S Krishnaswamy. The government in November issued fresh guidelines fixing statutory ceiling for remuneration inclusive of salary, commission and perquisities for top managerial and executive personnel in private sector companies at Rs. 1,32,000 a year. The Union government also announced in November the floatation of 3 loans for Rs. 400 crores which on subscription will raise the Union government borrowing to Rs. 1,499 crores for the year.

Gold Sales : Following the suspension of gold sales reported in the last issue (see p 637), the Union government established in early November a committee under the Chairmanship of the RBI governor to review the gold sales policy in all its aspects and make appropriate recommendations. The total gold sales amounted to 12 tonnes out of the total stock of 80 tonnes. It reports that the difference between the international price and domestic price of gold which had been 40 per cent at the start of the gold sales declined to 35 per cent, and later when the difference widened, the sales were stopped. It reiterated that the aim of the sales was to reduce smuggling by making available gold through official channels, an aim which was not realised because of the small amounts offered, and that too in driblets. The government also reports that the sales did not result in significant cornering of gold on the basis of the widespread participation in the bids, and the wide and balanced regional representation among the successful bidders, though because of its being the major commercial centre, the largest number of bidders were from Bombay. It attributes the sharp rise in gold prices in September and October as being due to speculative factors which were unaffected by the gold sales policy, a view it holds is confirmed by the fall in gold prices after October.

Public Sector Performance and Industry: Public sector performance presents a mixed picture as at September 1978. On the one hand, the 106 industries covered by the Directorate of Technical Development are reported to record an overall growth of 9.6 per cent, during the five months April to August 1978 (the Union industry minister reports that all public sector units taken together recorded an increase of the order of 34 per cent during the six months April to September.) The manufactured machinery sector increased by 14.9 per cent during the five months, the miscellaneous manufacturing sector by 13.9 per cent and other machinery by 13.3 per cent, food manufacturing by II

per cent, chemicals and chemical products by 10.1 per cent, basic metal products by 9.4 per cent, transport equipment by 8.7 per cent and electrical appliances by 8.6 per cent. A group of 30 industries, however, shows a declining trend which are reported as due to disturbed industrial relations, powercuts, and coal and raw material shortages, transport bottlenecks, sluggish demand and shifts in technology. In fact, the Bureau of Public Enterprises report for 1977-78 shows that for 170 public sector firms, the pretax profits fell from Rs. 470 crores in 1976-77 to Rs. 258 crores in 1977-78 and after tax profits from Rs. 240 crores to Rs. 25 crores. This is a poor record. One confusing factor is that though steel production maintained a high level, profits were an eighth of the previous year. This was due to cost escalation and lack of price escalation compensation. HEC which at long last made a small profit in 1976-77 recorded a loss of Rs. 30 crores in the following year, and heavy engineering matellurgical industries generally showed a decline in earning, with Coal India and FCI increasing their losses, the former lossing Rs. 90 crores. Only the trading and service firms, STC and Air India, showed increased earnings. This is related to the 3.5 to 4 per cent industrial growth recorded in 1977-78 (see Vol VIII p 454) and it is to be hoped that the increased growth reported for the first six months of the current financial year will show increased earnings. The cement industrial sector reports a growth of 97.9 per cent, agricultural tractors 50.1 per cent, paper and pulp machinery 41.5 per cent, typewriters 31.9 per cent, domestic refregerators 29.8 per cent, with similar increases in the electrical equipment, transport equipment, basic metal product and chemicals sector as well as in the consumer items sector. The new project such as HMT Tumkur watch factory and that at Srinagar and the tractor units at Pinjore and Mohali are reported to be progressing as schedule and the NTC expected after years of sickness to show a profit. The government reports that industrial growth during the six months April-September 1978-79, show a growth of 9.1 per cent, with significant increase in the production of crude, petroleum, pig iron, fertilisers, vanaspathi, sugar, cotton yarn, aluminium, blister copper, zinc, lead, commercial vehicles, jeeps, motor cars and diesel engines, with moderate increases in cotton cloth and jute manufactures. On the other hand, production of saleable steel, petroleum products, cement, scooters and railway wagons recorded a decline compared to the output in the first 6 months of last year. Electricity generation increased by 11.4 per cent, vanaspathi 36.8 per cent, cotton cloth by 2.7 per cent, cotton yarn by 8.7 per cent, jute manufactures by 3.8 per cent. Cement declined by 0.6 per cent, cotton products by 2.6 per cent. Nitrogenous fertisers rose by 7 per cent and phosphatic fertilisers by 17.9 per cent. More resources are being made available to khadi and village industries and the Cement Corporation. Government reports that speedy steps are being taken to ensure maximum capacity use of industrial units in the large scale corporate sector. The liberal imports of sophisticated technology, equipment, plant and machinery and the relaxation in industrial licensing are aimed at better use of capacity in industries which offer economies of scale. It is now necessary to create additional capacities in a number of industries to avoid future shortages and for this investible funds are adequate to support

the needed new *investment*. Also reviews are being held with the private sector in the order to devise ways and means of reducing the incidence of sickness in industry and improving the efficiency of the whole sector.

National Production Front:

Steel: Steel production fell by 15 per cent during the 3 months August to October 1978, due, it is reported, to inadequate coal supplies. The ingot production in SAIL plants was 28 per cent less than the October target, when the supply of coking coal did not exceed 36,000 tonnes a day against the commitment of 42,000 tonnes. In the first 10 days of October coking coal supplies averaged 31,300 tonnes a day and for the second 10 days 34,000. Instead of the normal coke oven pushings of 2,158 per day, in October the average was 1,730. Even in the first week of November, the average was 1,826. In general, steel plants had around 5 days coking coal stocks, Bhilai, TISCO, IISCO being most seriously hit, the last having less than its daily requirements. Rourkela reports that it hopes to produce 11.78 lakh tonnes of saleable steel during the current year and a number of modernisation measures are being taken to achieve higher quality production, including the new technology in the Silcon project for the manufacture of cold rolled grain oriented and non-oriented electric sheets. The Union government also announced that it is setting up a sintering plant at IISCO to use the 20 million tonnes of iron ore fines accumulated in its Guva captive mines. The ore fines have been accumulating at the rate of 1 million tonnes a year on an annual production of 7 lakh tonnes of iron ores, involving also a loss in view of the low price of Rs. 9 per tonne paid by Bokaro against its cost of production of Rs. 36 per tonne. One positive element is the 58 per cent increase in the output of mini steel plants during the first 6 months of the current financial year, at 7,94,270 tonnes compared to 5,02,826 tonnes produced in April to September 1977-1978. Capacity use increased from 53 per cent last January to 69 per cent in July. This good performance is due to several government measures to help the industry, such as abolition of the excise duty on ingot and rolled products, permits to import 2,00,000 tonnes of ferrous melting scrap with exemption of customs duty, abolition of excise on heavy melting scrap produced from the integrated plants, the diversification into certain grades of alloy steel and the soft loans from IDBI. As an alternative to scrap, a sponge iron plant with capacity of 30,000 tonnes is being set up at Kothagudem, and will go on steam by 1979 end. On the distribution side, there are serious complaints from industrial small and large consumers about the scarcity of sheets and angles, resulting in their having to pay a premium—as a result of the new distribution policy (see Vol VIII pp 382-383). As part of its decision to step up R and D in steel, SAIL is setting up in Ranchi, a large Rs. 17 crores (including a foreign exchange component of Rs. 6.2 crores) R and D complex. MECON will provide the consultancy services to the complex. Located on a 20 acre site, it will have 13 laboratories for mettallography, mechanical and magnetic testing and X-ray diffraction, hot treatment, corrosion, melting and solidification of mechanical processing, refracting, fuels, raw materials and iron making and instrumentation. It will have 325 engineer scientists

The complex will enable the steel industry to develop its own technological expertise to optimise existing process, improve products, assimilate imported technology, enhance acceptability of the products, ensure satisfactory returns on investments and eventually strive for export of knowhow. The R and D project will help identifying appropriate technology for our steel industry, which will influence not only production patterns and input utilisation practices, but also the future demand patterns.

Crude: The strike and industrial unrest in Iran continuing in October and November resulted in decline of crude imports from that country. Of the 14.5 million tonnes of crude imports in 1977-78 a little over 6 million tonnes was from Iran. Almost 90 per cent of the Iranian supply for this year has been received and to that extent the immediate prospects are not bad. Even so, as the basis of the short fall of 1.5 million tonnes from Iran, the government obtained the agreement of Iraq for an additional 5,00,000 tonnes and 3,00,000 tonnes of diesel and other petroleum products from friendly countries. In addition UAE has agreed to supply an additional 5,00,000 tonnes from January. Negotiations are underway with the Soviet Union and some other Arab countries for the supply of additional crude and other petroleum products. The demand for them is increasing at an annual 11.8 per cent and the serious scarcity of diesel experienced in Haryana, Punjab, Rajasthan and Uttar Pradesh in the current busy season will be met with these increased despatches. For next year, crude imports are estimated at 16 million tonnes, which with the 13 to 14 million tonnes of indigenous production (4.4 million tonnes offshore and 8.7 million tonnes onshore), it will be possible to meet the estimated demand of 30 million tonnes for petroleum products in 1979-80 (up from 28.4 million tonnes for this year). The current crude import bill is Rs. 1,300 crores. UAE has agreed to increase its supply above the pledged 1 million tonnes for next year. In addition ONGC exploration is being sped up, with 11 inland and 3 offshore basins being taken up for exploration. So far drilling off the Tamil Nadu coast, one by the Asmara group, 10 structural wells and 18 deep wells by ONGC as well as its two in the Karaikal and Pondicherry offshore areas have not given any commercial results. The government announced in November that the public sector Koyali Refinery in Baroda will be commissioning its additional 3 million tonnes expansion project in mid December, using the fluidised catalyst cracker (FCC) technology making the refinery with a total capacity of 7 million tonnes, the biggest in the country. The government also announced in November that cooking gas will be available at all district headquarters by 1980-81. In addition to the present 2.8 million people who had gas connections, there are 1.1 million on the waiting list and further registrations which have been started again—all of which will be met.

Coal: Further to the coal shortage referred to earlier, November saw a cumulative set of problems facing the industry, viz, uneconomic pricing, restricted power supply, shortage of explosives, strained industrial relations and flooding of a large number of coal mines in the eastern region plus continuing vacancies in the top managerial posts, resulting in an anticipated loss of Rs. 145 crores this year, in addition to the accumulated loss of Rs. 240 crores

since nationalisation of coal mines in 1973. Supplies to the southern region of soft coke almost dried up in November, Tamil Nadu's last supply of 1000 tonnes being in April 1978, while Kerala and Karnataka have not had even that. CIL estimates a shortfall of 6 million tonnes, ECL and BCCL 8 million tonnes with Central and western coal fields increasing their output by 2 million tonnes. Even these estimates are on the high side, (ECL which produced 12 million tonnes in the first 7 months, hopes to produce 11 million tonnes in the next 5 months, while its mines will have to be dewatered during November, BCCL which produced 10.7 million tonnes in 7 months, expects to produce 9.3million tonnes in 4 months). The government reports that coal production in April to September 1978 was 46.9 million tonnes against 46.4 million tonnes in 1977 April-September, and on that basis estimates that the year's production will be 107 million tonnes against the target of 113 million tonnes. The government has finalised the import of 7000 tonnes of explosives and another 3000 tonnes are under negotiations to help boost coal mining. The government also reports taking steps to increase coal production, from western and central and Singareni fields by an additional 1 million tonnes over the year's target, using high pressure pumps to speed the dewatering of flooded coal mines and move coal from the pithead to power, cement and other priority users. In terms of long range planning Coal India has finalised a massive Rs. 1,850 crores investment plan to increase its production to 153 million tonnes by 1982-83, clearing 7 of the 106 projects for Rs. 700 crores in November. Its subsidiary CCL whose target for 1978-79 is 24 million tonnes which is likely to be achieved as it was not affected by the West Bengal and Bihar floods, plans to increase its production by 59 million tonnes in 1987-88.

Iron-ore, Copper and Other Metals : The policy of increased exports of iron-ore (from 1970-78, 150 million tonnes have been exported and for this year and till 1980, 23 million tonnes are to be exported annually) will leave the country with no reserves to support our steel production within the next 60 years according to the Union steel ministry's computation. If steel production goes up from the current 10 million tonnes to 40 million tonnes by 2000 AD and 110 million tonnes by 2,030 AD and ore exports increase from the present 23 million tonnes to 54 million tonnes per annum by 2000 AD at which level it is pegged, then our ore resources will be exhausted by 2,037 AD; if steel production increased only to 75 million tonnes in the 21st centuary and iron exports are 54 million annually, the ore reserves will run out in 2025 AD: if steel production is 100 million tonnes at that time and with the same iron ore export prediction, our ores reserves will be exhausted in 2020 AD. Our total ores reserves are 10,544.84 million tonnes, with more than 55 per cent iron content. The kind of linkage effect this would have on other industries is seen in the notice to close given to the Mining and Allied Machinery Corporation (MAMC) which in 1977-78 lost Rs. 20 crores (an average of Rs. 7 lakhs a day) due to low productivity but also to the decline in coal production for which the III and IV Plan fixed a target of 136 million tonnes (only now has it reached 100 million tonnes); and so the machinery produced by MAMC has been well below its capacity and only 9 per cent of its total equipment is being used to

produce mining machinery. The government announced that the production of copper and its by-products at the Khetri copper project will be resumed at the end of November after the 50 day closure for overhaul, modification and adjustments. With the capacity of 31,000 tonnes, its production last year was 30 per cent, which will increase to 40 per cent this year and 50 per cent in 1979-80. This requires increase in the output of the copper mines which produce 1.7 million tonnes of ore, with which 15,000 tonnes of the blister copper is produced, and so imports of concentrates from the Phillippines and Peru are now being negotiated. By 1981-82 the copper project in Malangkhand will supply concentrates to Khetri in addition to the small deposits around the Khetri sites.

Railway and Shipping : The railway freight for revenue earning target of 222 million tonnes for the current year has been reduced to 210 million tonnes due to the short fall in coal and steel production. The post budget increases of excise, steel prices and two DA instalments have involved a liability of Rs. 7 crores and floods a loss of Rs. 30 crores. As at November, the gross earnings of the railways are about Rs. 47 crores behind the budget projection, so that this year's surplus may be reduced. The railway ministry also calls attention to the difficulties it faces because the state forest departments—mainly in Assam, Kerala, Uttar Pradesh and Orissa—are not meeting its demand for sleepers for replacing old sleepers and constructing new lines. Against its requirements of 17 lakh broad gauge sleepers and 14 lakh metre gauge ones, it has received only 9.6 lakhs BG and 8.7 lakhs MG sleepers. For the current year it needs 12 lakh BG and 15 lakh MG sleepers but is promised by the states only 6.65 lakh for each of the 2 gauges. Part of the problem is the price being offered which should be revised by the Central Board of Forestry to provide an incentive to the State Forest Departments to meet this urgent demand. An IDA credit of Rs. 152 crores is being used by the railways to finance the wheel and axle plant at Karnataka (Rs 38 crores), for provision and testing of control equipment for AC electric locomotives (Rs. 8 crores). modernisation of locomotives (Rs. 35 crores) and for updating of 5 railway workshops. An ESCAP report on shipping refers to the exploitation of Indian shipping users by the multinational conference lines serving India, Pakistan, and Bangladesh. On freight rates, there was a doubling in 18 years (1948-1966) but a quadrupling in 7 years (1966-73), during which time India's wholesale prices increased only from 100 to 383. Again while the rates increase for India has been 300.7 that for Japan only 243.7 and Australia 277.4. Further the ships serving India are old, 55 per cent being 15 years and above and 29 per cent 20 years and above, the latter being scrap by international standards. Finally the report points out that the lines do not negotiate with the shippers councils, but simply announce their decision. It is time to break this monopoly.

Housing, Paper and Small Units : NSS and NBO estimate that the housing shortage on the eve of the Fifth Plan was 15.6 million housing units in the country, against which a 20 year perspective plan has been established to wipe out the backlog and meet the additional demand due to population growth. In the current plan, 1978-83, an outlay of Rs. 1,538 crores, including Rs. 500 crores for rural housing, has been made (the total being

2½ times the fifth plan provision). Under this scheme, public funds will be used for LIG and EWS housing and tax rebates and other incentives offered to private investors to enter building industry. This is also supported by the 2 day conference of state ministers of housing heldin New Delhi in November who have asked the Planning Commission to give housing the status of a high priority sector. The paper industry, which the government hold is indulging in malpractices of not adhering to the Paper Control Order, manipulating supplies to certian regions and starving others, making supplies not according to invoiced quantity and selling the difference without proper receipts and claiming a premium over mill prices, has been warned that if these did not stop, the entire production will be limited to one or two varieties and the government may take over the distribution system. The government warning is timely. The inauguration of the National small Industries Fair in November in New Delhi showed that small industry covers a wide field including engineering chemicals, electricals, electronics, leather goods, hosiery and sports and though its share is only 6.5 per cent of the Rs. 15,000 crores invested in industry, it accounts for 22 per cent of total industrial output and 32 per cent of industrial employment. The Prime-Minister used the occasion to reaffirm the government's decision to help small, cottage and tiny industry to the full, along with large and intermediate industry.

Textiles and Fertilisers : The controlled cloth part of the New textiles policy (see Vol VIII p 509) has begun badly. For the quarter, October-December 1978, out of 100 million metres quota of controlled cloth to be produced, 50 million metres were opened to tenders, the other 50 million metres being the responsibility of NTC. Only 16 million metres have been taken up by the private sector mills, so that NTC will have to produce 84 million metres for which it needs funds and time, and a great part of which will therefore be carried over to the next quarter and make its task even more burdensome. This means that the private sector is not doing even its minimal subsidised share for the controlled cloth scheme, and some other means besides the excise set forth in the October 3 ordinance which became law by Act of Parliament on November 30 is needed to ensure that private mills play their part in the scheme. ATIRA computes that the textile industry will need a large Rs. 780 crores to Rs. 1,300 crores at current prices during the next 12 years to meet the increased demand for yarn and cloth by 1990. This will cover the investment needed for the increase in spinning, weaving and processing capacity, and the modernisation of existing machines—excluding the production of man-made fibres. Similarly a Fertiliser Association of India study estimates that investment in the fertiliser sector must go up from the present Rs. 4,000 crores to Rs. 7.000 crores in the next few years to create the 7 million tonnes of additional fertiliser capacity by 1982-83 to make up for the short fall in avaliability. Against the anticipated Sixth Plan capacity of 1.9 million tonnes of nitrogenous fertiliser, 3 million tonnes capacity is needed and the phosphatic fertiliser plan capacity of 8.8 lakh tonnes will have to be increased by 0.9 lakh tonnes. Even with these increase, the country will be importing fertilisers for the next 10 years – the gap between demand and domestic supply will be 8,80,000 tonnes of nitrogenous and 3,93,000 tonnes of phosphate

fertilisers in 1982-83, increasing to 25,22,000 tonnes and 10,31,000 respectively in 1987-88-whose imports will be heavy burden on the country. During the first 6 months of the current year, 9.9 lakh tonnes of nitrogen and 3.72 lakh tonnes of phosphates have been produced, representing a capacity utilisation of 65 per cent in the case of nitrogenous plants and 72 per cent for phosphatic plants—due, it is reported, to coal and wagon and raw materials shortage and delay in supply of rock phosphate and delay due to port congestion.

Sugar: Further to decontrol of sugar and its effects (see Vol VIII pp 510 and 581), on November 9 the Union government assumed powers to takeover sugar mills which did not start crushing by November 15 or had cane arrears in excess of 10 per cent of the cane price payable in respect of the 1977-78 season. The takeover of mills will be for a period of 3 years, the owners being paid a compensation at the rate of Rs. 500 per month for mills having a daily crushing of upto 500 tonnes and at Re. 1 per tonne subject to a maximum of Rs. 1,250 for mills having a capacity over that limit. This is due to the serious increase in arrears due to cane growers which the government at October 1, 1978 estimated at Rs. 53 crores and which was 6.7 per cent of the price due to the growers against the 2.5 per cent due in the previous year. Uttar Pradesh mills alone owed Rs. 37 crores or 14 per cent of the current dues. Added to the dues question was the problem of mills postponing the start of crushing which will reduce the sugar supplies to consumers and also hit the growers. According to the government, 41 mills started crushing on October 30 (31 in Maharashtra, 8 in Karnataka and 1 each in Tamil Nadu and Andhra Pradesh). Earlier on October 29, the Bihar government tookover 16 sugar mills (of the 29 mills, 4 were takenover by the previous Congress government, 1 is a Union government unit, 4 run by the British India Corporation and 1 sick, when the Bihar branch of ISMA stated that mills would not be able to undertake repairs or overhauling of the machines to prepare for the crushing season that they could not pay cane dues, and had no funds to buy cane. The takeover was the state governments answer. The industry was shocked and moved the Calcutta high court for a stay order which was granted. The Union government ordinance unlike the Bihar government ordinance is not takeover of the mills but takeover of the management of the mills. On November 18, 165 mills out of a total 293 in the country were issued showcause notices under the November 9 ordinance. By November 21, 115 mills had started crushing operations, plus seven state owned ones. Of the 41 units having cane arrears in excess of the prescribed level, 24 are in the cooperative sector and 17 in the private sector, out of the 178 receiving the showcause notice, 55 are cooperatives. The statewise break up was Uttar Pradesh 69, Bihar 27, West Bengal 2, Assam 2, Haryana 4, Punjab 3, Rajasthan 3, Madhya Pradesh 4, Orissa 3, Maharashtra 9, Gujarat 7, Karnataka 5, Kerala 3, Tamil Nadu 13, Andhra Pradesh 22, Nagaland 1, and Goa 1. The mills were given 7 days time to answer why they have not started crushing and the reasons for having more than the prescribed level of cane arrears. On receipt of the replies, the takeover will be decided. The government has introduced a Bill to replace the ordinance in the Parliament. Under the Bill even mills which cease manufacturing sugar before the expiry of the average period of sugar

manufacture will attract the provisions of the bill. It provides for the appointment of custodians for the takenover mills. There will be a sugar glut in the country after the crushing season, with stocks reaching an all time high of 97.04 lakh tonnes (last year's highest was 64.72 lakh tonnes) and the carryover will be 34.04 lakh tones (double of last years 16.24 lakh tonnes). Sugar production this season is expected to be 63 lakh tonnes. D-30 grade sugar in September to November was selling at Rs. 2.35 per kg. in Bombay, at Rs. 3.10 in Calcutta and the Madras E-30 at Rs. 2.25 to Rs. 2.60 per kg. The government announced at the end of November that it has decided not to create any sugar buffer, but is helping the industry to get bank credit to pay off sugar cane arrears. Sugar production in October 1978 was 74,000 tonnes against 33,000 tonnes in October 1977. The offtake during that month was 4.98 lakh tonnes for internal consumption and 1.36 lakh tonnes for exports compared to 3.76 lakh tonnes and nil in October 1977. The fall in price following decontrol has increased consumption. The closing stock on October 31 was 27.58 lakh tonnes compared to 12.32 lakh tonnes on October 31, 1977. A meeting of Chief Ministers of the Northern states has urged the Union government to provide relief to the industry through withdrawing the excise on Khandasari, cutting the excise on sugar, liberalising the licensing policy for khandasari units, promoting sugar exports and setting up new co-operative sugar units in Punjab, Haryana, and Madhya Pradesh. The Union government is studying the effects of the declining price of sugar, which, however, will make Indian sugar competitive internationally.

Floods: In November, the Union government estimated that the floods in 1978 involved loss of 2,350 human lives, damaged 92,950 lakh hectares cropped area and involved a total loss of Rs.402.50 crores. The most serious losses were in Bihar with 22.36 lakh hectares affected, an affected population of 150 lakhs, 9.36 lakh hectares of crops damaged valued at Rs. 8,533 lakhs, 2,24,000 houses damaged valued at Rs. 613 lakhs, 466 cattle lost, 166 human lives, Rs. 7,513 lakhs public utilities damaged, adding up to a total damage of Rs. 16,659 lakhs. The second most seriously affected state was West Bengal with 30 lakhs hectares involved in which 152.55 lakh people live, 13.28 lakh hectares of crops damaged valued at Rs. 1,013 lakhs, 19,04,411 houses damaged valued at Rs. 9.11 lakhs, 2,01,345 cattle lost, 813 human beings lost, public utilities damaged to the extent of Rs. 6,115.50, lakhs, all totalling to Rs. 7,137.61 lakhs. Without the November damage, Tamil Nadu's loss is small valued at Rs. 15,000, but the Central team which visited Tamil Nadu has estimated a loss of Rs. 25 crores suffered by the people and the state in the early November floods and landslips, with the damage still being assessed for the late November storm and rains. Against this situation, the Union government made available assistance to 14 states, the largest being to West Bengal—advance plan assistance Rs. 88.93 crores, kharif loan Rs. 2 crores, rabi loans Rs. 30 crores, wheat allocation 50,000 tonnes, rice allocation 45,500 tonnes, foodgrains under the food for work programme Rs. 1 lakh and medicines Rs. 36.75 lakhs, followed by Uttar Pradesh (Rs. 54 crores advance plan assistance etc.) and Bihar Rs. 44.92 crores etc. Flood control measures initiated since 1954 up to March 1, 1978

have resulted in 10,782 km of embankments, 19,067 km of drainage channels, 266 town protection schemes and 4,703 villages being raised—all costing Rs. 633 crores, offering protection to 98 lakhs persons out of a total area of 250 lakhs hectares prone to floods. In addition to the states' action in setting up the Brahmaputra Flood Control Commission (Assam) and the North Bengal Flood Control Commission (West Bengal), and the Union government's Ganga Flood Control Commission, a working group has been constituted for review of the annual and recurrent floods of the Indo-Gangetic plain and to prepare an action plan to control and mitigate the effects of floods in the next 5 to 7 years.

Agricultural Production: On the basis of the recommendation of the 1965 Panse Committee, the Union agricultural ministry, which accepted the recommendation to revise the index number of agricultural production every five years released at the end of 1977 a new series with a revised basis, namely, the trienniun ending 1969-70, under which the weight for foodgrains increases from 65.86 to 68.12, with a sharp increase in the weight for wheat from 8.36 to 12.16. The index of agricultural production for all crops declined by 6.7 per cent to 117.1 in 1976-77, after the impressive rise of 15.3 per cent in 1975-76. The long term trend in agricultural production since 1949-50 is one of increase at a slow pace and marked by fluctuations due to monsoon fluctuations. The index does not support the theories that Indian agriculture has achieved an inbuilt stability based on the new farm technology and the changes in the cropping pattern. At the end of November, public agencies had 16.85 million tonnes stocks of cereals, comprising 10.21 million tonnes of wheat, 6.07 million tonnes of rice, and 70,000 tonnes of coarse grains. The total estimated cereals production in 1977-78 is 113.8 million tonnes and pulses 11.80 million tonnes compared to 99.8 million tonnes and 11.36 million tonnes in 1976-77. FCI announced in November that the total weatherproof storage capacity in the country is 14 million tonnes and CAP capacity an additional 6 million tonnes. With World Bank aid, 3.5 million tonnes of storage is being constructed and the private sector is building a further 1.5 million tonnes capacity. The loss of grain in storage and handling is about one per cent of the total grain handled by FCI, it reports. Against the paddy procurement target of 5.2 million tonnes for 1978-79, by early November FCI had purchased 12.6 lakh tonnes in Punjab and 1.2 lakh tonnes in Haryana compared to 4.8 lakh tonnes and 0.6 lakh tonnes procured in the two states by November 1977. Haryana reports that it may enter the market and purchase all the 10 lakh tonnes to prevent distress sales. In Assam, the paddy crop has been hit and the possibility of its emerging as a surplus rice production state has receded in view of the large scale destruction of its winter paddy crop in Cachar district due to insect attack. On the price front, on November 14, rhe Union government decided to raise the issue price of wheat from Rs. 125 to Rs. 130 per quintal, which means that wheat flour selling in fair price shops for Rs. 132 a quintal will now rise to Rs. 137 and will of course affect all food prices. The Agricultural Prices Commission recommended, as noted earlier, an increase of Rs. 2.50 and Rs. 15 per quintal in the minimum price of wheat and gram which will make the

support price Rs. 115 per quintal for wheat and Rs. 140 per quintal for gram. This announcement at the start of the rabi sowing seasing is in accord with the government's decision to announce the support prices at the time of sowing instead of harvesting in order to influence production. Accordingly large increases are expected in the pulses output. The rise in the procurement price of wheat is covered by the increased issue price (by Rs. 5 as noted). In view of the growing criticism of the methods of determining the cultivation costs of different crops by the Ministry of Agriculture Directorate of Economics and Statistics, (the south has been putting forward cost for rice cultivation which are much higer than those of the Directorate on the basis of which an increase from Rs. 85 to Rs. 100 per quintal has been requested and refused by the Union government), a new expert committee to review the scheme for determining the cost of cultivation of different crops is to be set up. Rabi sowing is underway in all states. Haryana has set itself the high target of 42.3 lakh tonnes for rabi foodgrains, with an area of 27.20 lakh hectares for foodgrains and 1.2 lakh hectares for oil seeds. There is some anxiety about the delay of rabi crop sowing in Punjab, Haryana and Uttar Pradesh due to the acute shortage of diesel, non-availability of fertilisers and the delayed harvesting of paddy, but sowing is expected to be completed by the end of November, as result of action being taken to meet the shortages. FCI reports that its experiments have demonstrated the use of anhydrous ammonia which is the new nitrogenous fertiliser in liquid form is more advantageous and economical to farmers than the conventional urea fertilisers. Another problem faced is the shortage of certified wheat seeds for rabi sowing as the National Seeds Corporation has about exhausted its stock and the FCI is being approached to meet the spurt in demand for seeds. Also the government has finalised a scheme to create a reserve stock of foundation and certified seeds to meet any sudden spurt in demand, following a national calamity, for instance. The scheme is to build up a reserve of 3,000 quintals of foundation seeds and 37,200 quintals of certified seeds at a cost of Rs. 2.58 crores. The West Bengal agricultural production programme is reoriented to achieve higher production during the rabi season to offset the floods' production losses. The cropwise area is being expanded from last rabi's 18.52 lakh hectares to 24.95 lakh hectares and a package of practices for wheat, rice, potato, pulses and oil seeds is being used along with effective plant protection and water use methods. The Jute Corporation of India has been permitted by RBI to step up its price for raw jute within a range of 12.5 to 15 per cent over the existing minimum price of Rs. 150 per quintal both to respond to the rise in raw jute prices and meet its target procurement of 9 lakh bales. The central Borad of Forestry at its November meeting recommended that prices of raw material supplied to forest based industries should cover the cost of production including land rent, investment, interest and an allowance of at least 10 per cent. All projects involving diversion of forest lands to non-forestry uses should be scrutinised from the environmental angle and should make provision for any loss of forest lands. Strips along canals, roads and railway track should be taken up by the department in the states for afforestation. India is negotiating with Sri Lanka a long term programme

for sale of wheat flour, in which freight saving will make wheat cheaper in that country.

Exports: The Union government review in November over the export performance suggests that while export volume may not fall, export earnings may decline this year by 13 to 15 per cent in relation to the target of Rs. 5,800 to Rs. 6,000 crores. The six month export earnings, April–September 1978–79, are Rs. 2,497.36 crores compared to Rs. 2,713.63 crores in April–September 1977–78. The decline in exports earning are most marked in tea (–144.3 per cent), cashew kernals (–64.1 per cent) iron and steel (–57.9 per cent) groundnut extractions (–36.5 per cent), coffee (–25.1 per cent), with tobacco, spices, iron ore, cotton, handlooms and cement also showing lower earnings than in the previous year. The good exports earning performers are gem and jewellery (48.6 per cent), engineering goods, (39.3 per cent) silver (38.6 per cent), leather (23.1 per cent) cotton garments handlooms (22.9 per cent) and mill (22.1 per cent) sugar (18.4 per cent) with jute manufactures, marine products, castor oil, processed foods, manganese ore, basic chemicals rayon textiles, sports goods, woolen textiles also showing increased earnings. The government review attributes the fall in export earnings to: (a) recessionary conditions and protectionist measures in industrialised countries, (b) fall in rupee value of the dollar, (c) fall in international prices of tea and coffee (d) increase in domestic demand in iron steel and cement, (which can be queried), (e) power shortage, (f) transport bottlenecks and ports congestion, (g) industrial unrest, (h) unprecedented floods, (i) reduced availability of imported raw cashew nuts, (j) difficulties faced by exporters due to local state policies on prices and sales taxes, (k) problems of new S and T and decline in trade to rupee trade countries and (l) government policy to restrict items of some commodities to bring down their domestic prices. Fish production is picking up and its export and the export target of 73,780 tonnes valued at Rs. 226.57 crores will be attained. Engineering goods exportsin July were a record Rs. 42.32 crores compared to Rs. 28.60 crores in July 1977, and for the 4 months April to July were Rs. 209.3 crores, being a 18 per cent increase over the same period in 1977. At this rate, the year's target of Rs. 720 crores will be achieved and though the 1979–80 target of Rs. 850 crores would also be attained, the government has reduced it to Rs. 820 crores in order to strengthen its production base through modernisation and expansion. With a new export order of 5.75 lakh tonnes of iron ore from GDR and one from Yogoslavia, MMTC expects a 20 per cent increase over the iron ore export target this year. The chrome ore export target of 2,72,000 tonnes will depend on an export agreement with China as will be noted later. Export earnings from tea will improve, with the replacement of multinationals in marketing of tea by NAFED and NCCF from whom UK, Sweden, Denmark and Japan have agreed to make purchases. In November, the government announced a new policy under which the export of 20 species of wood and timber will be freely permitted in all forms, including logs and sown under OGL–3. Only export of sandlwood in log and sawn forms has been banned. US announced that Indian textiles have been exempted from the purview of countervailing duty investigation now underway and this will help textile

exports to that country. Also in November the Union government announced the extension of cash assistance for exports which was due to expire on March 31, 1979 for a further period of 3 years, as part of a 3 year export import policy, which includes supply to exporters of raw materials at international prices, active involvement of ministries and state governments to boost exports, diversifying exports from the small scale sector, incentive for labour intensive products, extension of the concessional customs duty of 25 per cent ad valorem on a variety of import of capital goods not produced indigenously, and a concessional customs duty of 45 per cent ad valorem to certain raw materials for the electrical industry. Cost subsidy of 6 instead of the previous 10 per cent is to be restored to hessian exports. The textile quota distribution policy for 1979 and 1980 is to be continued with the ratio of mill made to handloom items being 2:1 for the US and 1:1 for EEC areas, if both items are clubbed together for allocation. The government after consulting the various export promotion councils has increased the floor price for exports of garments, by 12 to 50 per cent, a move welcomed by large exporters, but opposed by small ones, who have no foreign branches and whose competitiveness with Pakistan, Sri Lanka and Mauritius exporters will be affected. In November the government decided on import of jute on a loss sharing basis, linked mainly to exports of carpet backing. Exports of plastics and linoleums for the six months, April to September, fell to Rs. 11.74 crores compared to the exports during the comparable period in 1977-78, and also in relation to the current 6 month target of Rs. 17.50 crores due to lack of availability of inputs at international prices and the heavy import duty on raw material. While Indo-US trade turnover in 1978 is expected to be Rs. 1,500 crores against Rs. 1000 crores in 1977, Indo-EEC trade growth is being held up because of the high cost of Indian goods compared to that of Taiwan, Italy Spain, Switzerland and Japan. The unfavourable trade balance with EEC is a serious problem. In 1976-77 the balance was favourable (+ Rs. 380 crores), in the first 10 months of 1977-78 it was Rs. 148 crores. Another bad mark was Pakistan's returning to India part of the wheat seed of 5,200 tonnes supplied to it (see Vol VIII p 585) because it was sub-standard. Another problem area is Indo-Soviet trade, with India's growing trade surplus, where even use of Soviet technology in such areas as alumina and pig iron production will only enhance the Indian trade surplus, while the cost of technology transfers and machinery and equipment import from USSR will have no impact on India's imports from the Soviet Union. India is not able to increase its imports of Soviet equipment and machinery without hurting its own capital goods industry and India's need for more petroleum products and non-ferrous metals cannot be supplied by the Soviet Union except on free foreign exchange basis. Hence the rupee trade agreement between the 2 countries faces a stalemate as far as expansion is concerned Mean-while the new rupee-rouble parity of Rs. 10:1 established in November increases substantially India's burden, for the large credit contracts entered after 1976. However 60 per cent of the trade in crude and petroleum products is in dollars and it is only 5 per cent of the trade which is expressed in rupee, and the new credit contracts will of course become more burdensome.

International :

Bangladesh : The sixteenth meeting of Indo-Bangladesh joint river commission met in Dacca in November and agreed on the procedure for joint study and investigation of the proposals formulated by the 2 countries for augmenting the dryseason flow of the Ganga. It is expected that further talks on developing the water resources of the river will be held when the reports are ready.

China: Indo-China trade is beginning to open up with the removal of some of the political references to Tibet in trade documents. Chinese tung oil-the best in the world-is now being imported by India for use in paints, varnishes and palstic additives. Similarly MMTA is sending a delegation to China to negotiate on chrome ore exports to China as a follow up to an order for 20,000 tonnes of the ore placed by China with a Calcutta firm. India is exporting $ 3 million of tobacco to China amounting to 2,200 tonnes and India will be purchasing 10 tonnes of raw silk from China. So far the 2 way trade has been of the order of Rs. 15 crores. Discussions are underway on the Chinese side with regard to mining and earthmoving equipment, agricultural machinery including tractors, machine tools, construction materials, dyes, rubber and sugar from India and on the Indian side on non-ferrous metals, raw silk, newsprint, basic chemicals and drugs from China.

World Monetary Reform: IMF in November sold 50,000 ounces of gold at an average price of $ 224.02 per ounce (the highest so far in the auctions), and raised $198 million for its special fund to help poor countries, which now totals $ 2 billion. In October the US dollar reached record low levels—175.50 yen to the dollar, 1.71 marks and £ 2.05 to the dollar—with a demand for massive intervention by the US government to rehabilitate the dollar. The US President crash dollar defence package announced in early November was backed by Japan and West Germany so that the dollar in 24 hours recovered to 186 Yen, and registered an eight per cent recovery against the Dutch Mark, 6 per cent against the Swiss Frame and 7 per cent against the British Pound. Canada also planned to impose restrictions on the amount of money that people can take out of the country. Indonesia devalued its currency by 33.4 per cent against the US dollar on November 15.

World debt: As at mid November, 11 industrialised countries had announced plans to convert $ 6.2 billions loans owned by developing countries into grants. UNCTAD reports that the bulk of this adjustment-$ 5.7 billion owned to 8 countries-was a response to UNCTAD trade and Development Board of last March (see Vol VIII p 278). The conversions were made by Federal Republic of Germany $ 2.3 billion, UK $ 1.87 billion, Japan $ 1.2 billion, Canada $ 254 million, Sweden $ 200 million, Netherlands $ 133 million, Switzerland $ 120 million, Denmark $ 105 million and Finland $ 42 million to 29 less developed countries and 16 other low per capita income (MSA) countries.

UNCTAD: The Fund and Wheat Programme : In November UNCTAD witnessed two frustrations in its programmes. Its two weeks meeting with delegates from 100 countries to negotiate on the planned multimillion dollar fund to

stabilise commodity prices did not arrive at a conclusion, despite the opening statement of the delegates from the industrialised countries that they were willing to take a more flexible stand and the realistic target of $ 500 million needed to launch the Fund. There was lack of agreement on (a) the size of the fund, (b) how much money should be given to it through separately negotiated agreements and (c) whether all government contributions should be compulsory. Both industrialised and developing countries agreed that the fund would be in two parts—one to cover buffer stocks to be bought when prices are low and sold when they are high—a part which both sides agreed would be compulsory, and a second part to cover non-stocking measures, which the industrialised countries wanted to be based on voluntary contributions but which the developing countries want also to be compulsory. The conference adjourned to meet sometime in 1979 to cover the wide gap between the 2 groups of countries. The other UNCTAD meeting also in Geneva in November was of wheat exporting and importing countries to agree as to future world trade of wheat and secondary grains and on food aid to developing countries. There were 3 separate drafts on these issues prepared by the London based International Wheat Council. The unsettled issues before the Geneva meeting were (a) the size of wheat reserve stocks to regulate world market prices, (b) how to finance them, (c) supply and purchase commitments in periods of wheat shortage and abundance, and (b) the prices and procedure for price regulation. In the wheat draft there were 90 bracket clauses, representing the alternative views of the developing countries. In the other 2 drafts-on secondary grains-barley, maize, oats and sorghum-and the Food Aid convention to provide the Third World with 10 million tonnes, there was near uncertainty. However agreement could not be reached on the main document on wheat and so a working group to discuss special treatment for developing countries in the new wheat agreement and another working group on the mechanism to operate the new wheat accord aimed at controlling prices and ensuring supplies. The conference broke up at the end of November, largely because of the US-EEC differences, with the US seeking a package agreement for freeing and regulating international trade in both industrial and agricultural goods-a position which EEC could not accept.

World Trade: GATT's annual report states that the volume of world trade grew at a faster rate in the first half of 1978 at 6 per cent compared to the 4 per cent growth during all of 1977. During the first 6 months of 1978 petroleum production of the OPEC countries declined by 9 pet cent compared to the same period in 1977, while it rose by 9 per cent in the industrialised countries and 5 to 6 per cent both in the communist countries and the developing countries. There was no increase in petroleum consumption in the industrialised countries taken as a whole between 1973-1977, as the marginal annual increase of 1.1 per cent in North America was counterbalanced by the decline of 1.5 per cent per annum in Western Europe. During this period petroleum consumption rose by 7 per cent in the developing countries. The exports and imports and of developing countries which had risen to 11 and 14 per cent in 1976 slowed down in 1977, both rising by 5 per cent in volume terms and 13 per cent in value terms.

The trade surplus of oil exporting developing countries in 1977 was $ 10 billion lower at $ 59 billion which was their 1975 level. Countries exporting mainly manufactures were dynamic exporters among oil importing developing countries their export growth in 1977 being 10 per cent in volume and 22 per cent in value compared to 5 and 16 per cent of oil importing industrialised countries. In 1977 world trade in manufactures rose by 15 per cent in value and 6 per cent in volume—a little better than in 1976.

Technology Assessment and OETC: A UN seminar in Bangalore has recommended that the developing countries should institutionalise the use of technology assessment in public decisionmaking and encourage the private sector to build techhology assessment capability. Technology assessment concepts should be introduced at all levels of the education process and in priority areas where partial or full technology assessment should be conducted. Technology assessment was defined as a process for the systematic analysis, forecasting and evaluation of a broad range of impacts on society, pertaining to technological change and choice in order to identify public policy options, in order to match technological development to national goals. Industrialised countries in addition to training technology assessment personnel for the developing countries should assess all technologies to be transferred to the developing countries and incorporate technology assessment in all foreign assistance programmes. The UN system should create a central focal point to collect and disseminate information related to technology assessment to developing countries, incorporate the concept of technology assessment in all relevant UN activities and create opportunities for specialisation in technology assessment and encourage technology assessment procedures by governments. These recommendations will be before the UN conference on Science and Technology which is to meet in Vienna in August 1979. The Indian institute on Foreign Trade in the context of UNCTAD V and NIEO has proposed an organisation of the least developed countries to be called Organisation for Trading and Economic Cooperation (OTEC), for translating the principle of progress through self initiative and self management into a series of self determined programmes for action. The Organisation will deal with common problems and create facilities for mutual benefit and establish institutional links at the horrizontal and inter—regional level to ensure integrated operations. The developing countries have had little or no impact individually and collectively on economic and trade development and have suffered between 1970–77 a decline in their GDP, agriculture, manufactures, gross domestic investment, export purchasing power, and import volume—trends if continued will leave them in the present parlous position even in 1990. For the least developed countries (LDCs) the per capita level at the 1960–77 growth rate in constant dollars in 1990 will be 61 (compared to that for all developing countries, (ADCs), 107), manufactures 13 (ADCs 172), gross domestic investment 23 (ADCs 215), export purchasing power 18 (ADCs 111) and import volume 34 (ADCs 126). The worsening economic situation of LDCs is due to the low level of their export receipts conditioned by low output levels, and to count this, their import capacity has to be strengthened through

much larger and external assistance flows for a sufficiently long time. Most of these countries are one or two commodity exporters: in 1973 coffee accounted for 86 per cent of Burundi's exports, 68 per cent of Uganda's and 38 per cent of Ehtiopia's, petroleum products 72 per cent of People's Republic of Yemen, sugar and honey 76 per cent of Guyana, and jute 52 per cent of Bangladesh. In light of the recommendations of the developing nations, conferences at Manila, Colombo and Mexico and various UN resolutions, the area of co-operation between LDCs and other developing countries can be vastly strengthened and expanded and both groups of countries can mutually help each other.

World Sugar: The International Sugar Organisation estimates that the net import requirement of the total free market for sugar will be 15.52 million tonnes in 1978 and 17 million tonnes in 1979. To establish the global quota for each of the years, it will deduct exports from USSR and East Germany and exports from those exporting less than 30,000 tonnes and exports from non-members. EEC will be exporting 3 million tonnes which is 75 per cent of the estimated total non-member exports. There is a petition against EEC on sugar dumping filed with the US sugar department, which will have to be resolved.

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II Agricultural Development

Paddy and Other Crops :

Towards the end of November, harvest of kuruvai paddy over 3.36 lakh acres in Thanjavur district except for about 50,000 acres was completed. The fortnight's sunny wheather enabled farmers to move paddy stocks to the market where prices rose by Rs. 4 to 5 to Rs. 52 per bag of 57 kilos against the government price of Rs. 48.45. Since the kuruvai season started 58,702 tonnes of paddy were moved out of the district, including 10,000 tonnes of rice to Kerala and 6,000 tonnes of paddy to Karnataka. FCI purchases till the 3rd week of November were 4,723 tonnes of paddy and the State Civil Supplies Corporation (SCSC) only 256 tonnes. In view of some distress sales of paddy by farmers in the Pudukottai district below the official Rs. 85 per quintal the government and SCSC have been asked to open 6 direct purchase centres at Aranthangi and Alangudi taluks. One of the questions that the state government and in fact all the four southern governments have raised is the relation of the cost of cultivation of paddy to the Union fixed support price of Rs. 85 —a question which received fresh support with rise in the price of wheat from Rs. 112.50 to Rs. 115 per quintal.

The Government, after study of the costs involved, has urged a price of Rs. 129 per quintal. Hence a conference of agriculture ministers of southern states is to be held in Madras in December to consider this question of the price of paddy in relation to its cultivation costs. The kuruvai crop in 27,000 acres were submerged, out of 7.28 lakh acres of samba, 1.31 lakh acres were submerged, in the case of thaladi 15,000 acres were submerged. The government moved speedily and announced relief measures for small farmers affected by the rains and floods. Small farmers with 5 acres and below of unirrigated land and 2.5 acres and below of irrigated land were supplied with paddy seeds free of cost for raising thaladi crops, along with a subsidy of 25 per cent on fertilisers and *nitrogeous fertilisers for the samba crop* upto a maximum of Rs. 50 and Rs. 20 per acre. Damaged coconut seedlings were replaced with fresh coconut seedlings from the agricultural depots and free of cost. A subsidy of Rs. 100 per acre for lands under banana or sugarcane which were damaged and Rs. 500 per acre for damaged betel vines. For raising new potato crops (damaged in the Nilgiris), a subsidy of 25 per cent of the cost of seeds was given, with a ceiling of Rs. 250 per acre Rs. 100 per farmer. 100 per cent subsidy for reclaiming sand cast lands and wells of small farmers and 50 per cent subsidy for other farmers with a maximum of Rs. 1,000 per acre and Rs. 1,000 per well were given. In the Nilgiris, the subsidy also covered reclamation of sand cast lands, silt levelling, terracing and construction of stone walls. In North Arcot, where 1,300 irrigation tanks in Arkonam, Walajah Vellore, Vaniyambadi and Tirupathur taluks have been filled, the samba prospects are bright and farmers in the district were scrambling for IR-2 and Bhavani paddy seeds, so that the samba crop in the district will cover 5 lakh acres. Palar has been receiving water for a month, recharging the wells in the area. The rains however hampered groundnut harvesting and the crop has suffered some damage. Similar reports of active farming as a result of the November rains are reported in the districts of Madurai, Salem and Tirunelveli, with buoyant demand for seeds and fertilisers which the agricultural department is able to meet. In Dharmapuri district, under the integrated rural development programme, a special scheme for popularising cultivation of paddy straw mushroom has been launched. There is good scope for raising mushroom in the district on a commercial scale for the neighbouring *Bangalore market. Mushroom cultivation* is to be undertaken throughout the year in areas in the district where the temperature does not go below 24°c. The extension staff and the gram sevikas for the 15 blocks are being trained at the Tamil Nadu Agricultural Research Centre at Payyur in Dharmapuri District for this special scheme.

Commercial Crops, Banana and Brinjal :

With a Rs. 55 lakh loan from the Agricultural Refinance and Development Corporation, a large commercial crops scheme has been launched in Madurai district over a five year period, involving coffee growing over 1300 acres in the lower Palni hills, and orange as an intercrop in 500 acres. Also a scheme for the cultivation of jasmine flowers in Athoor, Dindigul, Nilakkottai, Tirumangalam and Kallupatty blocks is under way covering an area of 100 acres. The schemes are being implemented through

the land development banks in the taluks. The banana crop in the lower Palni hills which is cultivated also as a mixed crop with coffee will produce less fruits this year—with a reduction of 5 per cent, because one sixth of the plants have been taken out and destroyed to provide for technical control of the bunchi top disease. The annual production in the 35,000 acres in the lower Palni hills is 1,75,000 tonnes of banana, worth Rs. 5 to 6 crores, employing 1 lakh persons, of whom 50 to 60 per cent are small and marginal farmers who have been seriously hit by this calamity. The disease has placed Madurai district under quarantine and the Pest and Diseases Act should be fully enforced and the crops sprayed, dusted and destroyed. The 5,000 acre Kolathur block where 2.5 lakh tonnes of brinjals are grown, the vegetable being ready for the market in late October and early November, faced this year serious marketing problems which brought down their prices very steeply—at less than 60 paise per kg—and caused serious distress among the farmers. There is need for a cooperative marketing organisation in the area and the growing of one other crop—chili or groundnut or ragi—in order that the small vegetable farmers would earn an adequate monthly income.

Research Results :

To meet the serious deficit in the country in pulses—24 million tonnes needed and 11.8 million tonnes output in 1977-78—Tamil Nadu Agricultural University has joined with other research centres in developing quick growing varieties for both dry and irrigated areas. In irrigated areas they can be grown as intercrops with groundnuts, cotton, sugarcane and in dry areas with ragi and tapioca, using appropriate rhizobium which can also reduce the amount of nitrogen fertiliser to be used. In the state, the area under pulses production has increased by over 80 per cent and production by near 110 per cent. Under the coordinated research project on micro nutrients in crops and soils, the micro nutrient deficiencies which following from multiple cropping and double cropping have increased six fold are being identified and are being remedied by the Fertiliser Control Order starting with regulated use of zinc. Similarly there was reason for the farmer insisting on using ammonium sulphate when urea was being sold and propagated to him, because research shows that the amount of sulphur taken from the soil by many crops particularly potato, groundnut and gram is so heavy that they need sulphur containing fertilisers both to increase the yield and improve its nutritive qualities. To improve information on data on land use, crop conditions and yields now gathered manually by village karnams with gaps, time lags, and errors, the Agricultural Resources Inventory and Survey Experiment (ARISE) used the remote sensing technique on two southern taluks which showed not only comprehensive views of waste, eroded and marshy and saline lands, it also provided the information for detailed agricultural land use planning and showed that acreage under rice cultivation had been seriously underestimated. ARISE should be extended to the entire state. To meet the problem of paddy growing in areas subject to heavy rain during the crop season, the All India Coordinated Rice Improvement Project has made available information on late duration culture-(R 210-1009 and 1011) which yield 4 to 5 tonnes per acre at 40 to 60 kg. of nitrogen levels in these

water logged condition, as well as a short *duration* variety—CRM 133241—which matures in 70 days in upland areas where the rainfall is low. CRRI, Cuttack is establishing an Azolla bank to supply this water fern/organic nitrogen fertiliser to large numbers of paddy cultivators. To counter the menace of the prodenia pest which attacks a large number of crops—cotton, tobacco, banana, maize, groundnut, sunflower, tomato, ladies finger, onion, cabbage, sweet potato, red gram and chow-chow in the state, the Tamil Nadu Agricultural University on the basis of its research findings advises that (a) Varalakshmi and MCU-5 cotton types should *not be grown together,* (b) the ratooning of cotton which perpetuates the pest should be given up, (c) castor, sunflower or blackgram should be used as trap crops, (d) light bamboo and polythene traps, NPU and insecticides can be used to control the pest and eliminate the larvae. The University has also released a power tiller for paddy harvesting which suits the needs of the small farmers for whom the tractor is too large and costly. The recently constituted Trivandrum complex of CSIR is taking up research on and use of agricultural products—mainly the plantation and food crops of Kerala. The increase in the protein content of tapioca, enhancing the colouring of the exported spices and reducing its fungus, *mechanising the dessication and powdering* of copra and work on coconut fibres are some of the research projects that have been taken up which would also be of interest and value to farmers and producers in this state.

Land Development Banks

Land Development Banks lending during the current year had declined because of the increased over dues by past borrowers. As against last year's loan of Rs. 12 crores and the past annual average of Rs. 19 crores, reaching Rs. 24 crores once, in the first seven months of the year, 1978-79, only Rs. 6 crores have been loaned. The over dues are in part due to droughts and cyclones in the recent past. The Union government and RBI have been requested to study this situation and relax the norms on arrearages for those farmers who have suffered from *natural calamities.* One result has been that the state government has opened up the lending for minor irrigation projects to the *commercial banks in the state which* while being welcomed by them is opposed by land Development Banks which fear that their main source of business will affected. The Registrar of Cooperative Societies has thus not identified the area of operations for the commercial banks so that many minor irrigation projects are lying unattended in the state. The 200 LDBs have to follow RBI norms on overdues, while the commercial banks have a more flexible approach and the competition that they will offer LDBs will benefit the farmers.

Cooperative :

As against the cultivation and medium term loans of Rs. 127 crores last year, the state's agricultural cooperatives will be making loans amounting to Rs. 145 crores this year, 40 per cent in the form of chemicals, fertilisers and pesticides and 50 per cent of the loans to small and marginal farmers and landless labourers. Under the one village one shop scheme, the agricultural credit societies will be running 12,000 fair price shops in 16,000 revenue villages.

This programme has been completed in Madurai and Ramanathapuram districts and will be completed in other districts by the end of December 1978. Consumer cooperatives which sold Rs. 140 crores of consumer goods last year will be selling Rs. 150 crores of such goods this year.

Poultry Farming :

Poultry farming is spreading fast in the state as a means of supplementing the low income of the small and marginal farmer and the landless labourers. Under the union government programme over 2,000 units of 50 layers each are to be set up, starting with 40 units in 4 districts. The Poultry Development Corporation supplies inputs for the poultry and does the marketing of eggs. As nearly 70 per cent of the cost of eggs is for feed, there is urgent need for research and demonstration to substitute cheaper substitutes for the present costly feed. Another byproduct of poultry development is poultry manure. Each unit can produce one tonne of organic fertiliser, which can be used over 1 acre and increase grain production by 1 tonne. Hence methods should be evolved for collecting, consuming and using this byproduct, as much as on improving the breed of the birds.

Tea :

Despite the flood damage to tea gardens in Assam, Bengal and Tamil Nadu and earlier drought and hailstorm, the government expects that tea production during the current year will equal last year's 560 million kg. It has fixed tea exports at 200 million kg compared to last year's ceiling of 225 million kg. During the 5 months, April to September, 1978-79, 66 million kg of tea exports earned Rs. 134.2 crores, compared to 101 million tonnes which earned Rs. 278.5 crores during the same period in 1977-78. This means that unit value realisation declined from Rs. 27.42 per kg to Rs. 20.30 kg. New export markets are being developed which include Pakistan, Libya, South Korea, and Chile. Also the government is encouraging states and territories not producing tea, such as Manipur, Sikkim, Mizoram, Nagaland, Arunachal Pradesh and Meghalaya as well as UP, MP, and Maharashtra to develop tea gardens. It is making a study of the role of brokers in public auction centres to improve their functioning and ensuring that 60 to 80 per cent of the tea produced reaches the auction centre. While not accepting the tea producers' demand to abolish the reduced export duty of Rs. 2 (see Vol VIII p 593) and expand the export ceiling, it has taken action to break the monopoly of multinationals, as noted earlier, in the marketing of packet tea and has offered incentives like reduction in excise duty to cooperatives of tea growers to market packet tea themselves. It has under study the Tandon Committee on tea which has recommended: (a) building a tea buffer to meet tea shortages in some years and arrest sharp price declines in years of abundance and meet the year round demand for tea of the north where the plucking season is only 8 months: (b) the tea Board undertaking continuing studies on London auction prices to prevent sub optimal prices of Indian tea sold there: (c) continued use of London tea auctions though with years its importance will decline: (d) value added tea products should be expanded and exported through concentrating on the neigh-

bouring countries which want packet teas as a first phase, then collaborating with existing packers in Europe and supplying their blends in bulk and sharing their profits in a second phase, and in the third phase marketing independently the value added middle price teas in the major markets now served by UK: and (e) packet tea should be sold within the country as a good testing ground. The Tea Board is drawing up a comprehensive scheme for extending tea cultivation in 40,000 hectares, in Idikki, Kerala at a cost of Rs 1,000 crores, which would produce Rs. 100 crores tea annually. This is part of Draft Plan projection to bring 8,000 hectares under new plantation and replantion and produce 700 million kg by 1983 and 1400 million kg by 1988. The International Tea Committee reports that in the first eight months of 1978, tea production was 6 million kg less than that of the same period in 1977, and could be less by 10 million kg by the end of the year, due mainly to the fall in production of Sri Lanka (8 millions) and South India (4 million), with Kenya and Indonesia increasing their output by 5 and 3 million kg.

Coffee:

During the first six months, April to September 1978-79, coffee exports earned Rs. 128.9 crores compared to Rs. 154 crores in the same period in 1977-78. The unit value of realisation of coffee fell sharply during this year from Rs. 40.15 per kg to Rs. 26.21 per kg. The International coffee organisation announced in November a world coffee price of $ 1.51 per lb as the trigger price which determines whether export quotas should be brought to comply with the economy clauses of the 1976 Coffee Agreement (see Vol VI p.655). If the price falls below this trigger price for 20 marketings, the executive board will meet to decide what action is to be taken.

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III Industrial Development

State's Industrial Profile:

The state government has over the last decade slipped from being the third most industrialised state to the sixth place in India, primarily because of the lack of an industrial policy and a series of gaps. The match and cracker industry organised in Sivakasi on a cottage industry basis is unique in the country, meeting national and international needs but facing problems of high freight, insurance and risky transport, on all of which there is no government policy. In the electronic industry, apart from the electronic estate and corporation, the

state has failed to carve a place for itself as have other states. The chemical industry is one area where there is a wide gap, with the need for a synthetic fibres and dyes and chemicals plant needed by the large textile sector in the state. The textile sector also faces obsolescence and needs resources for modernisation. The plastic industry is small and should be expanded through a petrochemical complex at Manali. The Tamil Nadu Salt Corporation is yet to make itself felt and help is needed to develop this native raw material industry on a massive scale in the small scale sector. Following the early lead given by the state in the joint sector, TIDCO, SIPCOT and SIDCO have a vast field of finding, financing aiding and entrepreneurs in the state and those who could be attracted from outside and on which effective action depends on these official bodies following a commercial and not beauracratic line. On industrial financing, the state has some of the forward looking commercial banks of the country which can and do provide working capital funds but term lending is still to develop with intelligent portfolio management. The power and other infrastructure facilities like the development of a broad gauge between Tuticorin and Madras to which reference was made earlier are in need of further help and development in order that the state may resume its industrial progress.

Salem Steel :

All orders for plant and equipment for the steel plant at Salem have been placed with in the approved cost of Rs. 127 crores including Rs. 35 crores of the foreign exchange component for the first stage of 32,000 tonnes per annum of cold rolled stainless steel sheets and strip and plant. The first stage will be commissioned in September 1981. For the first stage, Hitachi in Japan is supplying one sendzimir mill at a cost of Rs. 10 crores and at the second stage when its capacity is 65,000 tonnes, it will require the second sendzimir mill which SAIL has cleared. Hitachi has emerged as the largest stainless steel producer in the world and will be supplying Salem with one of the fastest mills. Salem which originally was to have all facilities for melting, hot rolling and cold finishing, on economic grounds now has been integrated with operations in ASP, Durgapur and Bokaro. Under this linkage scheme, ASP will melt scraps and Bokaro will hot roll there and send stainless steel coils to Salem, where after initial processing, they will be treated on the sendzimir mill, followed for flattening purposes by the skin pass mill which will also give them the shine. MECON is supplying Salem with the skin pass mill. The demand for stainless steel is fast expanding beyond the 60,000 tonnes envisaged for 1980 by the Planning Commission, it is nearing 1 lakh tonnes, the major consumers being engineering, chemical, fertiliser, pharmaceutical and food processing industries, as well as cutlery and utensils for exports. The sales turnover is expected to be Rs. 100 crores at the first stage of 32,000 tonnes and Rs. 200 crores at the second 65,000 tonnes stage, which will enable it earn a 12 per cent return.

HPF :

Hindustan Photo Films in collaboration with ORWO and Agfa Gaevert announced its plans for producing colour positive films and amateur roll films from 1979 in jumbo packs. To date, HPF was importing colour positive jumbos and

converting them into small finished rolls for the film industry at the rate of 28,000 finished rolls per month against a demand for 30,000 rolls. In view of the increasing demand, the unit has decided to make the films from the beginning. It will also build a buffer of 35,000 finished rolls of colour positive films to meet peak and unexpected heavy demands, through the imports of converted rolls, which have started arriving. The Film Finance Corporation's construction of low cost cinema houses in the country is to meet the need of 38,000 cinema houses against the present 7,000, and its financing of 18 mm colour films for TV and films societies will further increase the demand for HPF films.

TIIC:

Tamil Nadu Industrial Investment Corporation, the one term lending institution in the state to which reference was made earlier—proposses to lend Rs. 15 crores to small and tiny industries in the current year. It raised Rs. 1.45 crores in October in bonds and the state government has provided it with Rs. 1 crore to match Rs. 1 crores made available by IDBI. During April to October 1978-79, TIIC financed 360 industrial units for an aggregate amount of Rs. 6.78 crores, 333 units being small scale units. To aid the tiny sector, a mini loan scheme has been devised under which loans ranging from Rs. 5,000 to Rs. 10,000 are to be sanctioned to viable industrial units in areas covered by DICs. The loans will be exclusively for purchase of machinery and the interest 9 per cent. Also financial aid upto Rs. 5 lakhs at 11 per cent interest is being provided for purchasing fishing trawlers and mechanised fishing trawlers and mechanised fishing boats. The interest on loans granted for autorickshaw purchasers have been reduced from 10.5 to 9.5 per cent and that for technocrats operating in backward areas reduced from 9.5 per cent to 8 per cent. Its recovery position is good, with Rs. 5 crores repaid by October 1978 compared to Rs. 3.75 crores recovered by October 1977, reducing overdues from 24 per cent in 1975 to 15.18 per cent today. Based on project profiles prepared by the Tata Economic Consultancy group, TIIC has selected 100 profiles in the small and tiny sectors to set up industries, and SIPCOT has similary selected 61 profiles.

DICs:

In the states 8 DICs, 1200 entrepreneurs and 400 new units, have been selected and Rs. 85 lakhs distributed to operate them. In each of the DICs there was a functional manager to advise entrepreneurs in the villages, who normally needed a deal of help and encouragement to overcome the non-industrial rural atmosphere. With Union government help, the state will be investing Rs. 10 crores in rural industries and for this attitudes will have to be changed to develop small industries in the villages. Under the Union government's SISI programme, two conventional industrial estates are being set up in the Ramanathapuram district, in addition to the 6 mini industrial estates proposed by the state government. Rs. 218 lakhs are to be spent in the next 5 years to set up various industries and provide employment for 7,000 persons. A techno economic survey of the Ramanathapuram district by SISI has identified small industries including glass and ceremics, leather, electrical and allied items and engineering for an intensive assistance

programme. A specialised short term training course for young entrepreneurs to enable them to identify possible industries, and a training course on export marketing in the district, financial management and modernisation of cottage industries are to be run in the district.

Small Industries:

The Coimbatore District Small Scale Industries Association calls attention to the slow progress of small units development due to the problems of the growth of statutory liabilities as the unit grows, and the difficulties of realising the book value of the assets should an industry close down. The Association therefore proposes (i) income from business should be divided into trading income and manufacturing income, and for the latter there should be a deduction of Rs. 5,000 for tax deduction as is done for salaried people: (ii) to encourage industrialists to employ more people and pay them a reasonable wage, 15 per cent of the wage bill should be income tax deductable; (iii) to provide more job opportunities, an employment creation allowance may be allowed as allowable deduction; (iv) the income tax law should be amended to allow the small and rural entrepreneur to draw a monthly managerial salary as the large industry manager is allowed; (v) an insurance cover based on past income tax payments should be given to cover future sickness of the unit; (vi) the capital invested by the small entrepreneur must be allowed interest; (vii) units which employ 20 persons for every one lakh rupee or 3 persons for every 1 H. P. installed should be declared priority sector and those located in rural or backward areas granted 5 years income tax exemption; (viii) Indian Partnership Act should be amended to provide for limited liabilities for small scale investing partners,; (ix) at present partnership firms are subject to double taxation which involves changing the income tax Act for a single point taxation and (x) the indirect tax exemption granted to small industries with a turnover of less than Rs. 30 lakhs should be available to units doing job works for large units. These are important suggestions and should be considered as part of the employment promotion of the Plan. In the state, Commercial Banks have decided to help small scale units hit by the November floods in their rehabilitation. A part of their earlier dues are to be converted into term loans repayable over a few years, when the units is covered by the Credit Guarantee Scheme for small industries. Also they will lend to persons who are not in a position to repay the loans now but are capable of restoring their units with the needed financial assistance. RBI has suggested that the banks, in such cases, should spread out recoveries or be made part of the dues in the claim paid accounts of the future earnings.

Cement and Sugar:

From January 1, 1979 sale of cement is to be regulated under the Essential Commodities Act in the state. Only licensed dealers will be permitted to sell cement and consumers requiring more than 1 tonne (20 bags) will have to take a permit from the authorised revenue officer. Quantities of less than 20 bags and above 5 bags can be had on production of ration card, property tax or kist receipt. The state has an allotment of 3.5 lakh tonnes per quarter and this is adequate to meet the state needs, if there is no blackmarketing and cornering

of stocks which the new distribution system is meant to prevent. On the sugar front, the Tamil Nadu government has convinced the Union government that because of agroclimatic conditions in the state, the cane matures for crushing only in the second week of December and so the Union ordinance to start crushing by November 15 could not apply to this state. The Union government has agreed to the state government proposal that the state mills will start crushing in mid December. The Three cooperative sugar mills in North Arcot, at Tirupattur, Ambur and Vellore have a total accumulated stocks of 2 lakh bags of sugar and while their cost of production is Rs. 224 per bag for the Ambur mill and Rs. 245 and Rs. 292 for those at Tirupattur and Vellore, they are selling them in the open market at Rs. 177 to Rs. 181 per bag—involving heavy losses. The Ambur unit with a daily crushing capacity of 2,200 tonnes started crushing on November 11 with 14,000 acres registered against last year's 9,400 acres. While Rs. 127 per tonne was offered by it last season, the rate now is Rs. 115.30. The Tirupattur unit also started crushing with a registered area of 9,000 acres against last year's 8,000 acres. Vellore with 8,000 acres in both years will also start crushing soon. Ambur crushed a record 2,500 tonnes a day in the last season and the other two with an installed capacity of 1,250 tonnes each crushed 1,600 tonnes in the last season. Cane growers in the district face a falling jaggery demand market both in the state and in other northern states, as there is a division of cane to khandasari in these states also.

Fuses Plant and BALCO:

A Rs. 52 lakh project of S and S Power Switch Gear Limited to manufacture HRC fuses of 11 KV and above, medium voltage HRC fuses links and switching isolation for EHV system with collaboration of a UK firm was launched in late November at Porur. In addition to manufacturing fuse links, the plant will produce also isolators. These are a good alternative of the costlier circuit beakers. The Union government reduced the price of commercial grade aluminium by Rs. 1.40 per kilogram, which made the use of the 40,000 tonnes imported by BALCO costlier than the domestic product. So the government reduced the import duty on the imported aluminium which enabled the plant to clear the stocks held in bond at Madras and Bombay and sell at the same price as the domestic products. The present demand for aluminium is 2.50 lakh tonnes, in 1979 it will be 2.7 lakh tonnes, and will be 3.70 lakh tonnes by 1983. As in the installed capacity of all aluminium units is now 3 lakh tonnes, either an expansion of the units or the starting of new units must now be planned to meet the four to five year gestation period and to avoid continued import dependence.

Handloom:

In early November, handloom garments of over Rs. 50 lakhs were accumulated over a four month period, with an addition Rs. 50 lakhs in the pipeline. The visit to the US of the exporters association has not solved the problem of exports in which the association has asked for Union government relief and help. It is reported that several foreign buyers in the country are asking for handloom garments for next year and now that the quota for next year has been announced these deals can be finalised. The offer of handlooms from

the state to West Bengal to meet the flood situation has not gone through because of the price factor, which the West Bengal felt it could not afford.

Leather

RBI has directed commercial banks to relax their regulations governing the grant of working capital finance to the leather industry, following representations from the Leather Export Promotion Council that regulations have been rigid and the flow of funds not smooth. So far 50 per cent of hides and skins, 80 per cent of processed hides and skins have been exported with India losing the value added element which accrues to the foreign leather goods manufacturer. Now finished leather exports are increasing, their export earnings during the first five months April to August 1978–79 being Rs. 71.9 crores against total leather export earning of Rs. 133.9 crores. On footwear and components the earnings were Rs. 10.6 crores and might finish the year with Rs. 35 crores compared to Rs. 15 crores earned in 1977–78. India's leather export earning can exceed Rs. 600 crores if the quality factor is improved, which means improving our cattle population which at 345 million is the largest in the world, and the production of our outdated leather chemicals which forms 10 to 20 per cent of the cost of production, and if 60 per cent of export of semifinished leather is converted into footwear, garments, suitcases etc. There is also need for improved mounting, sophisticated technology, and mechnisation of small scale units which under the government plan have to produce Rs. 300 crores and export Rs. 100 crores. The state government is planning to set up a Leather Development Corporation to develop the industry to counteract the tendency of some states not to allow leather in raw material form to go to other states. This is short sighted and should be countered. There is also an appeal to the Union government to simplify the export formalities as most of leather exports have had to be speeded and sent as air cargo.

Private Sector Reports

Textool's annual report for 1977–78 shows a stable production and sales turnover record compared to the previous year, the mounting of larger package doubling machines for which it has a monopoly in the country as well as expanded wollen ring frames and spun silk frames. Its modernisation and diversification programme has yielded good results in reaching a rate of Rs. 9 to 10 crores output per annum. A 3 tonne Arc furnace manufactured by company has been instelled to produce special steels, exports have exceeded Rs. 70 lakhs and dividends and arrears have been paid for the year. The report for India Cements for 1977–78 shows a fall in gross profits of Rs. 5 lakhs, a sharp decline in net profits from Rs. 76 lakhs to Rs. 31 lakhs, compensated to some extent by higher provision for depreciation. The performance of the foundry division has improved a lot both in production and profitability so that 1978-79 returns ought to increase considerably. EID Parry Limited's annual report for 1977–78 shows a heavier loss mainly due to the loss incurred in the sugar division. Its export performance was not upto

earlier expectation, due to quota restrictions and its marine operations have ceased to be viable and was given up, as notedearlier. The operations of the other divisions have been profitable, which ought to reduce its over all losses.

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IV Education, Science and Health

Unrest in Educational Institutions

Unrest in educational institutions in 11 centres were reported in December—in Mangalore, Bangalore, Mysore, Ujire, in Karnataka, as a result of a Lok Sabha bye-election and the death of a student, in Patna, Muzzafurpur, Purnea and Kathihar in Bihar over job-reservations for backward classes, at Udaipur in Rajasthan over student discipline, at Hyderabad in AP because of student-staff clashes, at Villipuram in Tamil Nadu due to student grievances.

Educational Development

The State government announced in November the solution to a 15 year old problem, namely the integration of the staff of A and B wing schools with immediate effect. (The B wing schools were those run by district boards and taken over by the state government and those staff had been kept in a separate cadre all these years). Another important administrative decision was that the transfer of teachers will be made only during the vacation period, May to June and not during the school year and by a committee formed in each district with the Chief Educational Officer as Chairman and District Educational Officer and Inspector of Girl's schools of the district concerned as members and whose proceeding will have to be approved by the Joint Educational Director. This will eliminate non-technical factors in the posting and transfer of teachers. The government also announced that of 1.05 lakh pupils who had joined the higher secondary schools (+2 schools), 24,000 had opted for the vocationalised stream. The state government has instituted a Chief Minister's Children's Fund with a target of Rs. 1 crore in observance of the International Year of fhe Child in 1979. The Fund will be used for starting preschools, supply of hearing aids, calipers and artificial limbs to physically handicapped children:

Adult Education

A study in the villages of MP, AP, Bihar, Karnataka, Orissa and Rajasthan by a team of anthropologists of the SITE programme has resulted in some important conclusions which will be of use when the country launches its own sattellite in 1980 and the TV Programme

to be beamed from it: (a) due to the TV exposure a number of innovations, specially those requiring little or no external help and additional expenditure, were adopted by the viewers. If the innovations require alternation in the existing practice, it is quickly adopted and so this kind of instructional programmes keeping in view the target audience and their cultural sensibility should be telecast (b) programmes with universal appeal such as animal husbandry. health and family planning were easily understood by the viewers, but agricultural telecasts had the minimal impact because agriculture is area specific, where as SITE Projects cover large areas. Agricultural programme should be made keeping in view the diversity of the audience needs: (c) the satellite capability of two audio (languages) and one video (picture) transmission was used in AP and Karnataka and MP and Orissa where with the same picture and two languages were used, but the study of these techniques used in the cultures have not produced uniform and definite conclusion. There is need for more production research to innovate new techniques and formats for the production of multiple audio and single video programmes: (d) a comparison of the Hindi spoken in the villages of MP and Rajasthan and the languages used in the TV beamed to them suggests a possible loss of message comprehension and brings out the need to evolve a common languages for TV programme production, and so overcoming the class difference in the languages used and future TV programmes catering to the needs of this class as the prime target: and (e) SITE has uniformly helped in increasing knowledge in the areas, concerning overall modernity and political socialisation of both men and women. On this basis, it is recommended that to bring about political awareness and to increase understanding among the people, satelite based TV should be used by the country. Another survey on TV community viewing in Jammu and Kashmir reports that over 90 per cent of the rural viewers believe that TV has accelerated the socioeconomic development of their villages, that the rural programmes telecast from Srinagar had helped them in agricultural, horticultural, and cattle breeding development, that TV had created an awareness of the dowry as a social evil, that Butrat—the farmers programme—is the most popular one, in which the functional literacy part had enabled 83 per cent of the viewers to learn Kashmiri and Urdu alphabets as a result of which they could read and write to some extent, and that 80 per cent of the rural and 91.5 per cent of the urban audience viewed the news bulletins regularly to know about day-to-day happenings. This survey by the audience research unit of the Srinagar TV centre which covered 136 community viewing centres in the rural and 84 in the urban areas has come out with a report which is the audio-visual educator's dream. It needs checking by social scientists.

Technical Education

The Krishi vigyan Kendra (agricultural polytechnic) in Pondicherry which is now over 2 year old (see Vol VI p 653) gives farmers training skill in farming through work in the farm or workshop which is followed (not as usual preceded) by lectures and discussion. In place of the use of a large polytechnic building, the 200 acre farm in Kurumbapet serves as the class room and the various operations of paddy raising, which is the local industry, receives major attention. Learning includes, the

scientific implications of innovations of line planting of seedling, raising nurseries to produce sound seedlings, threshing paddy in a clean manner through use of tarpaulin as well as the scientific way of growing jasmine and tapioca and their industrial use. The participants in the Kendra are marginal farmers and owner or tenant cultivators who want to improve their farming practices. The trainees include illiterate farmers and school dropouts, and at the end there are no certificates or diplomas which can be used for whitecollar jobs. Plant protection measures for paddy and water management are taught and the trainee farmer is sent back to his farm to try out whatever of the methods he has learnt and wished to try out on his own on his farm and on his return to the Kendra participates in the training programme with more carnestness and interest. The training programme itself is based on the local farmers field problems on which specific skills are developed. The methods used in the Kendra have wider application for our education system. The programme of adoption of polytechnics by industries recommended by the All India Council of Technical Education is catching up. BHEL has decided to adopt the welding department of the government polytechnic Thiruchi, providing the initial Rs. 8,000 nonrecurring for equipment and Rs. 12,000 for recurring expenses for electrodes and honoraria for part time instructors. Also the government has instructed all engineering colleges and polytechnics to create a placement cell or section to offer guidance and employment information to their students. Also the Union government has selected 2 polytechnics in the state as "community polytechnics" with the responsibility of transferring technology to the rural areas. The state government also annonnced in November that it has under consideration a proposal to upgrade the Institute of Architecture and Sculpture into a college and locate it at Mamallapuram as an expression of the importance attached to the preservation and development of the traditional art of building temples and architecture related to it. A Union government committee of experts has recommended: (a) a comprehensive vocational training law to regulate and control training programmes in industrial establishments and training institutions in the country, (b) amendments to the Apprenticeship Act to this effect, (c) restructuring ITI training into modular programmes, with a common broadbased basic training programme for a group of trades, on the basis which the trainees could specialise, and (d) a national training infrastructure, including vocational training institutes for women in rural/tribal areas, to develop a net work of appropriate training facilities and economic and technical supporting services in rural areas.

Science

The Central Electro-Chemical Research Institute (CECRI), Karaikudi which has just completed 25 years has a sound record of its research having produced 110 processes, of which 74 have been licenced to 164 parties, who have on that basis produced goods worth Rs. 470 lakhs in different parts of the country. It has so far trained 416 scientists in storage battery technology, electroplating and corrosion prevention. Among the major achievements of the Institute are the development of carbon electrodes for AD cells a new power pack system to operate community radio receiver sets, the technology for production of sodium

metal employing fused salt electrolyses, the rotating electrode circuit the technology for the production of aluminium alloy anodes, copper coating of stainless steel and prevention of corrosion of steel in RCC constructions, the knowhow for the production of lead acid batteries for the small scale sector, the production of manganesium metal on a pilot scale as well as an active participation in the integrated rural devevelopment programme. This is a good record of achievement on the basis of which its future plans for battery based electric vehicles and other technologies are being developed. NCL, Poona, reports on its plan for research in rural development which include plant tissue culture work to develop virus free sugarcane and tree multiplication of teak, eculyptas and cardomom, a pesticide programme which has led to the commercialisation of 10 pesticide processes, the technology for making dissolving grade pulps from various hard and soft woods available in Indian forests and for the manufacture of rayon and tyre cord pulps, the development of fire wood varieties in Maharashtra and for making oxalic acid from the bark of ain trees on the basis of which a 300 tonne per annum plant has been set up at Chandrapur. It is also working on a long term project making use of the removable cellulose wastes for the production of glucose/protein rich animal feed and studies on water management and medicinal plants. The Madras University postgraduate extension centre at Coimbatore is planning a National Institute of Heterocyclic and Forest Products Chemistry at a cost of Rs. 99 lakhs. The working group on the Electronics industry of the Planning Commission has called attention to the poor quality substandard consumer electronics products—TVs, taperecorders, radios, calculators turned out by the manufactures and recommends that the Test and Development Centres being set up in various states by the Department of Electronics, should be selectively equipped to carryout the necessary testing for product certification, and the degree of the utilisation of these facilities by the private sector be monitored on a quarterly basis to stop this poor quality production.

Health

Encephalities, the brain fever disease has by November killed 116 persons and affected 200 others in Bihar, killed 721 and affected 2,400 in UP and is spreading all over the country including Tamil Nadu. The government sent experts from ICMR and NICD to Bihar, UP, WB, and Assam, the most affected states to devise preventive measures and has provided the states with additional quantities of insecticides, sprayers and fogging machines. Vaccine has been imported from Japan and with the help of WHO guidelines for its use established. Supply of allopathic and homoeopathic drugs are being rushed to the affected area and protectective measure taught to the people. On the family planning side, the Union government reports that against the year's target of 3.9 million sterilisations, in the first six months-April to September 1978-79—the achievement has been only 22.4 per cent, in contrast to 56 per cent in the case of IUD target and 65 per cent of the target for conventional contraceptions. Hence the Union government has decided to assign targets for sterilisation for field workers and revive sterilisation camps in the states, offering Rs. 5 for each case of sterilisation done in such camps. It report that during the Family Welfare

fortnight of October 16 to 31 there were 1,00,000 sterilisations. 10,000 camps in rural areas are planned and January 1979 is to be observed as the family Welfare month. The 50,000 trained community health workers are to be used in the programme, a private medical practitioner will get Rs. 30 for each sterilisation and Rs. 5 for each IUD insertion and cash awards are to be given to the best cumulative performance to a district, municipality or corporation in the four zones of the country and to one panchayat in each of the country's districts. The Coimbatore Districts Family Welfare Bureau reports that its birth rate has fallen to 29 per 1,000 (against the all India average of 32 and Tamil Nadu average of 30 per thousand). It has 41 family welfare centres, one in each block, achieved the highest family planning services in 1976-77 and 1977-78 in the state; with a ratio of 1 vasectomy to 30 tubectomy in 1977-78. Its target for this year 1978-79 is 33,000 but with four months left it has achieved only 10,000. The fifth International congress on hormonal steroids meeting in New Delhi in November referred to India having the world's leading researchers in contraceptive research and technology and recommended that contraceptive delivery systems which would release the contraceptive and provide protection against unwanted pregnancy over extended periods of time are necessary to counteract the overt and covert effect of oral pills. The AIIMS group's work on contraceptive implants filled with contraceptive steroids and injected into the subcutaneous tissue was recognised as outstanding. A survey on family planning conducted by the National Institute of Health and Family Welfare covering 7,271 people from all sections of life reports: (a) general favour for voluntary family planning, (b) suggestions by informed groups for statutory compulsion when couples had 2 or more children, (c) fear of after effects of sterilisation and IUD and the need for extensive education to overcome them, (d) increasing compensation to those accepting sterilisation and (e) universal approval for raising the minimum age of marriage for boys and girls and provision of sex education, using all media for the spread of family planning information.

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V Employment

In November, the strike by the All-India Port and Dock Workers Federation, referred to earlier, lost 10 days and seriously paralysed the Bombay dock and to an extent Madras and a few other ports. It was settled after 10 days, with the main demands of the dockers conceded. The Union government also

announced the setting up of a 4 member cabinet sub committee for examining the question of wages, DA and bonus to government employees including railway men, post and telegraph workers etc. On the employment side, as noted earlier, the Integrated Rural Development Programme, has started with HP sanctioning schemes in 10 blocks in 3 districts AP 136 blocks in 17 districts, involving an outlay of Rs. 50 lakhs and 4.8 crores respectively. In addition 169 SFDA covering 1,093 blocks as part of their programme which by October end had Rs. 21.62 crores sanctioned. The Union government also decided in November that the demand of Tamil Nadu, West Bengal and other states for inclusion of rice in the Food for Work programme is accepted and from now 50 per cent of the requirement of the state can be supplied in rice. In order to enable the workers to get more rice against the wage they earn than what they can buy with it in the open market, the Union government also decided that the rate for calculating the additional investment in this programme made by a state government over and above the normal public welfare budget by provision will be Rs. 115 per quintal per coarse grains, Rs. 130 per quintal for fine variety–which is Rs. 20 lower than the FCI issue price. The programme will be continued for 1979-80 and its further extension decided next year. The state government sanctioned in November Rs. 25 lakhs to provide employment to 20,000 rural women who will be involved in activities like making chalk, envelopes, palm leaf, and coir goods, safety matches and processing and packing dhal. They will be able to add Rs. 700-1,000 a year to their income through these activities. Women from poor families are also being provided with coconut seedling to be raised on the road side, each woman is to look after 10 to 15 trees and will be paid Rs. 1.50 a day for 4 years after which she could engage the yield, paying a nominal rent to the government. There are 30,000 km of road in the state and even if 1/6 were used, 50,000 women could be employed. The expendtiure for the trees would be Rs. 30,000 per km with 350 trees on both sides. The Karnataka government also announced in mid November an employment scheme to guarantee work for qualifying registrants for 100 days in a year during the slack agricultural season as from 1 March 1979. It will provide seasonal employment to 3 to 3.5 lakh landless labourers at a daily wage of Rs. 4, with two third paid in wheat and rice. It will start in 45 of the 135 taluks and cover adult men and women over 18 years living in a village and wanting work, which will be provided within 6 kms of the village. This is part of the rural development programme where employment will be provided in plan schemes, Union sponsored and special schemes like SFDA, DPAP, IRO and where these are inadequate, in additional programmes like minor irrigation, desilting, soil conservation etc. It will cost the state government Rs. 16 crores a year. UPSC has decided on a new scheme of civil

services examination—a single examination for all India and central services, in which the regional languages may be used in answering question papers, and *an obligatory paper in regional language* *and one in English carrying equal marks.* This is a step which will encourage the switchover to learning in the mother tongue, at all levels including higher education.

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VI Other Items

Director's Section

The first half of December was a very active and busy period in the Institute. Three major events took place, the Eighth meeting of the Heads of Social Science Departments of Southern Universities, the formal inauguration of the Institute and the All India Workshop on the Dynamics of Rural Transformation.

The meeting of the Heads of Departments was held from the 9th to the 11th. Attendance at this meeting was less than in previous years because anthropologists and some sociologists who were regular participants of the meeting had to be away in Delhi for the International Anthropology Congress. But the discussions at the meeting were, as usual, very purposive touching upon the problems of teaching and research in the social sciences in the Southern Universities. A new feature introduced this year was a survey on teaching and research in sociology in the different centres and departments in the South which gave a bird's eye view of the attempts being made to "modernise and Indianise" the teaching of the subject and of the main thrusts in research. The group found this a very useful exercise and it was decided that the survey of the teaching and research of each of the major social sciences should be taken up as a regular feature of the annual meeting. In this connection the Institute has also been asked to extend the coverage of its census of social sciences research which is now confined to Tamil Nadu to include all the four southern states. The meeting also made preliminary plans for the Ninth. Inter-disciplinary Research Methodology Workshop to be held at the University of Cochin at the invitation of the Vice-Chancellor of the University from June 9 to 12 on the theme "Caste and Class in India's Rural society". On the 11th the participants had an informal discussion with Dr D T Lakdawala, Deputy Chairman of the Planning Commission.

The formal inauguration of the reconstituted National Institute and of the All India Workshop on the Dynamics of

Rural Transformation was held on the 11th. Dr Lakdawala, who was the Chairman of the ICSSR Visiting Committee (1976) that recommended that the Madras Institute of Development Studies be elevated to the status of a National Institute within the framework of the ICSSR formally inaugurated the Institute and the Workshop. Thiru K Manoharan, Minister for Finance, Government of Tamil Nadu presided over the function and Dr Rajni Kothari, Chairman of the ICSSR conveyed greetings on behalf of the Council. The inaugural meeting also provided an opportunity to bring together "the wider family of the Institute", members of the Governing Council of the Institute, members of the Monthly Seminar and of the Special seminar, a good cross section of the academic community and of the public of the city.

The workshop on the Dynamics of Rural Transformation (11th and 12th) arose from the study conducted by Dr C T Kurien on the transformation of the rural economy of Tamil Nadu since the formation of the state and the commencement of the planning era (Reported in the Bulletin November 1978 issue). The ICSSR has decided that similar studies should be conducted for all the major states in the country so as to capture the varieity of patterns of rural change. The Institute has been requested to coordinate these studies and the purpose of the workshop was to workout the modalities of the studies. Representatives from Keraia, Karnataka, Andhra Pradesh, Orissa, Uttar Predesh, West Bengal and Rajasthan attended the workshop. It was decided that at least Punjab and and Haryana, Bihar, Maharashtra and the North East region should be brought into the region and that the studies should start by the middle of 1979 and be completed by the end of 1980. The project, therefore, will be a major concern of the Institute during the next two years.

IAEA

The Indian Adult Education Association held its 31st Annual Adult Education Confererence in Ramakrishna Vidyalaya, Coimbatore from November 5 to 7. The conference concentrated on assessing the results of the preparatory work which it and its 250 member associations had been doing this year under the National Adult Education Programme. Its finding was that the association members were, through their projects, centres, training and material, production, well set to launch the full fledged programme from the next financial year. The Conference provided a fruitful opportunity to the organisers and specialists to learn from each about motivation, techniques and functional successes. It decided on a programme of research, information, project work for the Association for the coming year.

ICCE and the Nehru Award:

The International Conference on Correspondence Education held its 7th conference—the first outside North America and Europe—in New Delhi from November 8 to 15 on the theme correspondence education and its future. It was one occasion when the many directors of corresponding education of the Indian universities were able to meet correspondence education specialists from Europe, America, Africa and other Asian countries and see the relation of correspondence education as a bridge

between formal and non-formal education. It could be a bridge and it is constantly innovating and developing new methods which were discussed. The jury for the Jawaharlal Nehru Award for International understanding met in November 1978 and decided on awarding the Nehru prize for 1978 to Venerable Fujii of Japan for his long and unrelenting work for peace.

Family Planning and Anti-Apartheid:

A meeting of the officers of the Family Planning Foundation in November took stock of the state of the programme in the country and the follow up that had taken effect on the part of the planning commission and the Union government in regard to its report on the future of the programme (see Vol VIII p 482). *In this connection it was noted that the* conference of state ministers of Health and the central council of Health had accepted the suggestion of the Foundation that there should be a National Population Commission that would review and monitor population trends and the Family Planning Programme in the country. It decided to call a meeting of social scientists in mid December to give further consideration to the proposal for a Commission. A second meeting of the National Committee for the observance of the UN anti-apartheid year was held in the third week of November when the progress of activities by the State Committees were reviewed and plans for calling a National Seminar and a National Public meeting were finalised. The budgets for the state committees were also approved and a programme of publications in the regional languages drawn up.

Futurology and Madras University:

A workshop meeting of the DST panel on Futurology was held in Srinagar at the end of November attended by 20 educationist and social scientists. After a review of the state of the art of futurology in the country, the workshop engaged in drawing a futurological model of Indian education in 2,000 AD, which outlined a learning system predominantly non-formal education in which the formal system was merged and in which equity was predominant. The Madras University Vice-Chancellor was felicitated at a function organised by the Mylapore Academy. The occasion was used for a review of the further future development in the changes that have become part of the University scene.

MIDS Governing Organs:

Meetings of the Executive Council and Governing Council of the Madras Institute of Development Studies were held in mid November. With the completion of two years of the reorganised council, the University representatives of the 4 southern states were rotated and the new representatives took their place. Both the councils reviewed the activities of the Institute in past year, noted the sound progress made under the direction of the new Director and approved the programme and budget of the Institute for the next year 1979-80.

1979 Seminar:

On the basis of discussions and agreements among members of the monthly seminar, the following programme of the seminar for the calendar year 1979 was agreed upon.

(See next page)

	Members	Subject	Residence
1	Abraham C M	Sociology	Coimbatore
2	Adiseshiah M S	Economics	Madras
3	Appa Rao M S	Management	Madras
4	Ardhanareeswaran B	Social Science	Madras
5	Arputharaj C	Agricultural Economics	Madras
6	Athreya V B	Economics	Tiruchi
7	Basu John	Technology	Madras
8	Bharathan K	Economics	Madras
9	Chandrasekara Naidu V	Economics	Madras
10	Chandran C S	Management	Madras
11	Chittibabu SV	Education	Madras
12	Devasia A	Economics	Madras
13	Devadoss T S	Philosophy	Madras
14	Ekambaram S K	Statistics	Madras
15	Joshua A	Education	Madras
16	Josef James	Economics	Madras
17	Jothi M S	Education	Madras
18	Kaiwar S R	Administration	Madras
19	Krishna Rao B	Economics	Madras
20	Kurien C T	Economics	Madras
21	Naik J P	Education	Pune
22	Nagaraj C G	Engineering	Madras
23	Natarajan T V	Political Science	Madras
24	Nayudamma Y	Physical Science	Madras
25	Pillai K K	Social Science	Madras
26	Ramanathan S	Sociology	Madras
27	Raj Kumar S	Economics	Madras
28	Ramanujam R	Economics	Madras
29	Seshadri C V	Engineering	Madras
30	Sethunarayanan A	Technology	Sivagangai
31	Srinivasan M	Agricultural Economics	Madras
32	Srinivasan E S	Economics	Madras
33	Shanmugasundaram V	Economics	Madras
34	Shanmugasundaram Y	Economics	Madras
35	Venkataswamy T S	Economics	Madras
36	Zachariah K A	Economics	Madras
37	Sivakumar S	Economics	Madras
38	Sundaresan R	Education	Madras

(Contd.)

	Members	Subject	Residence
39	Patankar S	Education	Madras
40	Rengarajan V	Economics	Madras
41	Chandran Devenasan	History	Madras
42	Kappan S	Sociology	Madras
43	Hegde K S	Engineering	Madras
44	Srinivasan P	Industrial Economist	Madras

MONTHLY SEMINAR PROGRAMMES-1979

Theme: CHANGING PROFILE OF TAMIL NADU ECONOMY AND SOCIETY

Subject	Author	Chairman	Date
Review of the Tamil Nadu Economy 1977-78	Y Shamugasundaram	C T Kurien	Jan 25
Productivity Trends in Tamil Nadu	B Krishna Rao	M Srinivasan	Feb. 22
Regional Pattern of Development in Tamil Nadu	K Bharathan & V Chandrasekara Naidu	A Sethunarayanan	Mar. 29
Budget—Central and State	R Ramanujam	S R Kaiwar	April 26
	NO SEMINAR		
Madras Metropolitan Development	C S Chandran	T S Venkataswamy	June 28
Town around Madras	Josef James	T V Natarajan	July 26
Slum in and around Madras	C M Abraham	A Joshua	Aug. 30
Rural Industries—Problems and Prospects	C Arputharaj	E S Srinivasan	Sep. 27
Tribal Welfare	S Ramanathan	K K Pillai	Oct. 25
Fishermen Community	S Sivakumar	B Ardhanareeswaran	Nov. 29
Voluntary Agencies in Social Change	S Kappan	C V Seshadri	Dec. 20
Review of the Tamil Nadu Economy—1978-79	Malcolm S Adiseshiah	V Shanmuga-sundaram	Jan. 31

Rajya Sabha :

A Third meeting of the joint select committee of the two houses met in mid November to take evidence on the Viswa Bharathi Amendment Bill, when the main evidence was with regard to Tagore's concept of Santi Niketan and how far it was able to preserve it during his life time. Rajya Sabha started its winter session on November 20 with a number of legislative enactments on pollution, antiapartheid, wages and children's labour, sugar mills takeover, Chit funds etc. on which it had to act.

December Seminar :

The paper for the December Seminar "The Strategy of Social Development Planning for Tamil Nadu" by V Shanmugasundaram together with a brief summary of the discussion on the paper at the seminar on Thursday, 21st December 1978 chaired by Dr. C. T. Kurien appears as the first article.

Second Article :

A paper on Social Justice—some economic notes appears as the second article.

The Strategy of Social Development Planning for Tamil Nadu

By

V. SHANMUGASUNDARAM

Madras

In this paper the actual VI Plan frame of the State of Tamil Nadu is not discussed. It has not yet been made available to the public. Nevertheless, the review of the Plan in earlier years in terms of public documents and Task Force reports are available. I limit the scope of the paper to the strategy of planning for the social services and the Human Resources Sector at the State level. In the first section, I present a brief review of the Human Resources and need for social change in Tamil Nadu; In the second, the strategy for bringing about social change for the purpose of economic development is outlined. The tentative issues and programmes that are necessary for such a change are also discussed. In the third section the specific areas of Human resource Planning and Development are identified, as Health and Education. From the position as obtained from the Economic Appraisal of the Government of Tamil Nadu and in the documents on Health and Education, it is needless to mention that the most vulnerable section of the society is children. The quality of education, the absence of, or the inadequacy of health services in this sector quite delays any remedial action. The proposals for improving education quantitatively and making it available for the weaker sections in terms of three levels: Primary, Secondary and Higher levels needs no special emphasis.

I

Human resource development has the twin objectives of building knowledge and skill on the one hand and providing employment opportunities for unutilized and underutilized manpower. In the formulation of plan strategies, the importance of human resources has not been adequately recognized till recently. The concept of human resource development cannot and should not be analysed solely in economic terms. Even if crudely estimated, it can be a more realistic and reliable indicator than any other purely economic indicators.

Two basic types of indicators could be indentified, viz., (1) those which measure the stock of human capital and (2) those which measure the gross net

additions to this stock. The former indicates the level of human resource development; the latter indicates the rate of improvement and is called the rate of human capital formation over a specified period. In computing a human resource development index the following indicators can be made use of: (i) levels of educational attainments (ii) net addition to the stock of educational attainments (iii) percentage of population of labour force in high level occupation (iv) rate of addition to high level occupation (v) level of health standards. (This could be identified in terms of nutrition levels and standards of preventive medical services from a positive angle or provision of curative medical services from a negative angle.) & (vi) rate of improvement of health standards. The above indicators can be appropriately combined with purely economic indicators like public expenditure on education, health and other social services as a percentage of national income and a complex measure evolved. A United Nations estimate puts India as semi-advanced in human resource development. This estimate has to be extended for interstate comparisons to identify areas of backwardness for development in human resource and to design appropriate strategies for development.

Tamil Nadu has an estimated population 46.39 million in 1978. (1971—41.84m and 1977–45.76m) The rural-urban population ratio is 5:1. The size of the working population is estimated as 36 per cent (1971 census) which is better than the All India figure of 34. The rural urban ratio of working population 6:4. Nearly 25% of the total labour force remained unemployed in 1970–71. In 1973–74 the number of jobs needed to absorb fully the labour force was estimated at 176 lakhs. The backlog of employment was 48 lakhs at the commencement of the Fifth Plan.

The unsatisfactory level of education and poor level of medical services are indicated from the tables given below. Appalling rate of dropouts at the age above 11 has to be checked and the very poor show on health account has to be reversed.

TABLE 1

EDUCATION : PERCENTAGE OF ENROLMENT TO THE TOTAL IN DIFFERENT AGE GROUPS

Age Group	1960–61	1970–71	1975–76	1976–77
6–11	70.25	94.13	90.0	91.7
11–14	32.59	55.10	52.0	54.4
14–17	15.31	35.30	33.0	34.1

Source : *Tamil Nadu Economic Appraisal*, Govt. of Tamil Nadu 1977, p. 153)

TABLE : 2

HEALTH : PROVISION OF MEDICAL SERVICES

	1970	1975
Number of beds*	37,844	41,089
Number of Doctors**	3,671	4,418
Number ot Nurses *	4,550	4,342

Source: *Tamil Nadu Economic Appraisal* (Government of Tamil Nadu 1977, p. 160)

*in Government Hospitals, dispensaries and Primary Health Centres only.

**Government and private non-aided hospitals and dispensaries.

The broad demographic data only show the immensity of the problem at the State level. To achieve the objectives of human resource development, the maintenance and improvement of educational and health level must be coupled with programmes to provide employment for the backlog of unemployed and the constant stream that is added to it.

II

Development is a social process, and the appropriate strategy is in terms of social planning which encompases education, health, social security, human environment, income distribution, working and living conditions of labour population etc. These form the sub-processes of a unified approach. Both social and economic planning aim at the same objective viz., higher standard of living and better life. To succeed in achieving the objective both strategies must supplement each other and none can score in isolation. More precisely the social development plans attempt to "improve society's social structure and to promote progressive socio economic changes which conditions the rational and effective use of available human and physical resources".[1] In short, social development strategies aim at social change. What direction this change has to take depends on the case in point. Proper diagnosis and appropriate prescription naturally results in cure to a great extent. Social change is not merely a means to development but is also reckoned as an end in itself. Considered as a plan objective by the State Plan of Tamilnadu, "Social change aims at the creation of a casteless and classless society". Hence it becomes necessary to approach it from multiple angles like, ideological, cultural, legal, educational, economic etc., There is urgent need to protect the vulnerable sections. Economic disparities are made worse by social disputes. Broad strategies in terms of education, health and nutrition, elimination of the caste system, economic uplift of weaker

1. MIHALK. J and SHANMUGASUNDARAM, V.; *Social Development Planning.* (University of Madras, 1974.)

sections, removal of social disabilities etc. can be identified. Those in operation show limited performance.

Investment in human resources has greater potential than investment in material resources. But analyses of human investments have undergone much less refinement than its material counterpart. It is essential to incorporate all submodels of planning in the central planning model. For instance, Educational model for the State of Tamilnadu can be constructed in terms of the Centralmodel (annual or five yearly) showing its linkages with the employment model. Similar exercises are necessary in terms of all the sub process under social planning.

International experience is rather valuable in this context. I have drawn from two major sources from the United Nations and World Bank Publications to highlight the significance attached to human investment studies. The educational model suggested for the Ivory coast economy is interesting from our point of view.[2] The educational system consists of a series of activities which result in the acquisition of skill. In each decision year there is a choice among the different educational activities. Some of these activities are alternative ways of acquiring the same qualifications. Each educational activity defines a sequence of cycles of study. Each study cycle defines a sequence of years of study and a sequence is characterised by a common set of parameters, like rates of promotion, repetition, student-teacher ratio etc. This educational matrix which is computed to serve as a component of the aggregate plan model can also be used as deterministic model of the educational sector alone. This deterministic model is helpful in testing various changes in the educational system.

Similar techniques may be evolved for other subprocess. The Task Force Report on Human Resources (Tamil Nadu) presents a sub target matrix with respect to "better working conditions". Provided data are forthcoming and authentic tools can be made as serviceable, as possible, social development strategies in the ultimate analysis come under the broad categories of 1) Manpower and employment 2) Labour Policy and programme 3) Development of Human Resources and social change 4) Welfare of the Harijans 5) Welfare of other backward classes 6) Social Welfare and social defence including children, women and the handicapped.

III

The most important areas of Human Resource Planning and development are education and health. As regards health, the dichotomy between the urban and rural is significant. Hospitals and other facilities are in the urban areas and their services are available mostly to the urban people. Health services in rural areas are in poor shape. Comparatively education seems to fare better. In these areas no phenomenal magnitudes are suggested because they are of a planning nature and I would not like to anticipate them except broad programmes and

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2. Goreux, L. M., *Interdependence in Planning—Multi level Programming Studies of the Ivory Coast.* (A World Bank Research Publication, 1977 pp. 240-265)

magnitudes in terms of percentages and related magnitudes. To a great extent "tropical medicine is the midwife of economic progress in the underdeveloped areas of the world."[3] Added to the list of diseases typically tropical, the less developed countries have the full set of diseases still prevalent in the temporate zones. Tuberculosis is the most *important. To combat such diseases* underdeveloped countries take over medical technology from the more developed countries. For temporal diseases either there are less effective cures or they are not economically feasible preventive measures. The elitist privileged class of medical men suffer from the "technological demonstration effect."[4] and are preoccupied with the medical problems that mostly concern the more developed countries. Their worry is more on degenerative diseases like cancer and heart diseases than the infectious, parasitic diseases from which *majority of tropical population suffer.* History of economic development in West Europe and United States of America reveals predominance given to programmes of sanitation *and public* health as a prerequisite for economic progress.

In countries like India it is shear obstrusiveness of diseases that motivates state expenditure on medical services. Scant attention is paid to economic factors in allocating resources to disease control, protected water supply and sanitation. The lags in preventive medical services vis-a-vis curative medical services are proof enough of the lack of efficiency in pursuing plan objectives. Particularly in the State of Tamil Nadu, Rs. 8.33 per capita was spent on medical expenditure in 1973 while that on public health was barely Rs. 1.16. The All India average is much better with Rs. 6.98 and Rs. 3.76 *respectively,*[5] *for the same* items of expenditure per capita (vide Table in page 56). Curative medicine has limited impact on health and it makes *very negligible difference to mortality and* morbidity in the absence of preventive medicine.

The inter-sectoral and intra-sectoral linkages of rural and urban models are to be clearly identified in the plan frame. In India, the dichotomy between urban and rural is being pressed too far in current discussions. But what is missed is the fact that our urban economy does *not and cannot function in isolation.* Good part of the urban production is for rural consumption. However, the rural economy does not possess many of the urban facilities like quick transportation, communication, water supply and sanitation. In terms of organisation of plan and multi level programming, certain backward revisions are necessary in our plans. Circular flow charts and relationship relating to new linkages *between human resources and production* and consumption possibilities to meet the social needs at micro and macro

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3. MAY Stacy : *Ecology of Human Diseases,* (New York, 1961), p. 165.
4. KAMARCK, A. M.: *The Tropics and Economic Development.* A World Bank Publication, (*Washington,* 1976)
5. Institute of Economic and Market Research for IBRD: *An Analysis of expenditures on Social Sectors,* (New Delhi, 1976)

levels are available[6] and they could be made use of in social development planning.

There is considerable enthusiasm in India as regards employment position in China. Throughout the 1950's urban unemployment was a severe and persistent problem in China. Chinese reports of the period mention unemployment running into the millions. For a twelve year period ending in 1960, the average yearly unemployment rate for non-agricultural workers was at least 12%. The country side was not better off either. During 1950-53 the average peasant worked only 119 days per year. Even the Great Leap Forward (1958-60) could not achieve the norm of 250 annual work days envisaged by the Chinese planning. Since then, ambitious plans were put into effect by accelerating the rate of industrial growth, transfering the idle urbanities to rural units and limiting peasant migration to urban areas. Within a period of two decades foreign and Chinese sources record high employment levels in 1970's and China has succeeded in sharply reducing the level of unemployment and this with a "modest degree of farmer mechanization."

The international comparisons as above in terms of health, educational characteristics and employment levels are given to indicate the relatively low position of India with the other developed countries. Educational and health data by themselves do not prove or disprove any of the immediate planning strategies because we cannot compare quality of the education and health or the historical problems of accumulated social development planning.

In a State like Tamil Nadu where prohibition plays a dominant part what is often ignored is that, alternative leisure time pursuits and alternative interpretation in food, consumption and related habits are not known or available. Prohibition policy is also challenged by operational efficacy. Even granting these facilities there will be a percentage of persons whose health conditions or social status require a stage that prohibition could be a compulsory measure with considerable risk to people violating it. Basically in Tamil Nadu prohibition costs somewhere between Rs. 150 crores. At least to make prohibition a success, a part of this amount should be compensated by the Centre to the States implementing prohibition. Development of Sports and healthy leisure time activities is essential to ensure a high standard of public health and nutrition. The expenditure on prohibition administration could be made cost effective by a comprehensive physical education plan [8] covering young and old in urban and rural areas.

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6. SHANMUGASUNDARAM, V.: "Towards a General Theory of Social and Economic Planning" in *Social and Economic Planning for Integrated Rural Development*, (Government of Tamil Nadu, Madras, 1976)
7. WORLD BANK: Internationalization, Technology and Employment in the People's Republic of China, (paper No. 291, August, 1978, p. 6)
8. SHANMUGASUNDARAM, V : Report on the Development of People's Sports & Healthy Leisure time activities in Tamilnadu. (State Planning Commission, Jan. 1976)

The social development plan would ensure redistributive *justice*, correct socio-structural errors and bring about scientific amelioration of backwardness. Education is not merely an undefined and indiscriminate individual skill formation but an interrelated process of living, learning and being. Health services need revamping to ensure that its quantity and quality are in terms of services to all who are in need. Similarly, public administration would be known for its effectiveness, not merely for bigness, or expansiveness. Public administration and voluntary agencies would share the total responsibility for rendering welfare services. In these and other measures social development planning would lay the foundations for a new era of long term socio-economic development of our country.

A grave social disability is untouchability. Constitution states—"untouchability is abolished and its practice in any form is forbidden". Economic untouchability is even worse. It affects *most of the rural population and* weaker sections in urban areas.

Social and Economic Planning requires continuous studies in terms of such disabilities which have to be corrected. Subsequently, however, these disabilities themselves become vested interests and inertia and lethargy may prevent orderly evolution. There are also emerging difficulties which are known as second generation or third generation social and economic problems. Some of them are of straight forward economic nature; Known techniques and strategies of planning could be applied by planners and economic administrators. Basically, inter-relationship between social and economic development, techniques of pure economics, strategies of economic administration, appraisal of projects, macro economic understanding of the landscape and critical micro studies are some of the exercises which the planning machinery should be examining.

STATE OF INDIA'S HEALTH SERVICES

	Population per Doctor	Hospital Beds per 1000 Pop.	% PHCs with 2 Doctors	Sub-centres per P.H.C.	Med. Expenditure per head Rs.	Public Health Exp. per head (Rupees)	Population 1976 (millions)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	4416	.63	99	7.26	6.16	3.44	47.7
Assam	2631	.46	28	3.56	5.32	1.73	17.2
Bihar	6083	.20	70	6.00	3.20	2.19	61.5
Gujarat	4900	.54	62	7.12	6.50	4.28	30.0
Haryana	6702	.54	49	8.35	16.11	5.17	11.2
Himachal Pradesh	9026	.93	16	4.28	13.23	11.19	3.7
Jammu & Kashmir	1810	.73	83	3.55	12.86	9.25	5.1
Karnataka	5300	.77	74	7.44	7.71	4.09	23.8
Kerala	3981	.88	100	10.80	10 90	2.92	46.8
Madhya Pradesh	21663	.30	95	5.96	4.68	3.85	56.0
Maharashtra	2592	.72	93	7.13	6.45	11.64	32.3
Orissa	7008	.40	15	5.32	4.85	2.70	24.2
Punjab	5863	.58	87	6.74	8.93	3.92	14.9
Rajasthan	12662	.52	38	6.82	7.30	7.00	28.8
Tamil Nadu	3511	.54	98	7.58	8.33	1.90	45.2
Uttar Pradesh	7672	.39	2	6.52	3.61	1.16	95.8
West Bengal	1747	.77	30	4.56	8.41	2.59	49.4
All-India		.55	58	6.36	6.98	3.76	605.6

Source : World Bank: *India: Occasional Paper* : (Staff working Paper No. 279, May, 1978. p. 199)

Summary of Discussion

At the seminar held in the seminar room of the Institute on 21st December 1978 presided over by Dr C T Kurien, in the absence of the author the paper was presented by Mrs Y Shanmugasundaram.

The scope of the paper was limited to the strategy of planning for social services and the Human Resources sector at the state level, presenting a brief review of the Human Resources and need for social change and the strategy for bringing about social change for economic development. The twin objectives of human resource development are the building of knowledge and skill on the one hand and providing employment opportunities on the other. The two basic indicators, in this connection, that can be identified are (i) those which measure the stock of human capital and (ii) those which measure the gross net additions to this stock. Levels of educational attainments, percentage of labour force in high level occupation, rate of addition to high level occupation and level of health standards are the indicators for a human resources development index. Reviewing the position in Tamil Nadu, the state has a population of 46.39 millions in 1978 with an urban rural ratio of 5:1. The working population was 36 per cent (1971 census) as compared to the all India percentage of 34, with rural urban ratio of 6:4. 25 per cent of the working population was unemployed in 1970-71. The number of jobs required to absorb fully the labour force was estimated as 176 lakhs. The back log of unemployment was 48 lakhs at the commencement of the Fifth Plan. Regarding the progress of education it is seen that the percentage of enrolment in the age-group of 6-11, 11-14 and 14-17 considerably increased during the years 1960-61 to 1976-77 but there was a large percentage of drop-outs above the age of 11. In the provision of medical services, the number of beds increased from 37,844 to 41,089 and doctors from 3,671 to 4,418, while the number of nurses decreased from 4,550 to 4,342 in the years 1970 to 1975 and was totally inadequate. These demographic data show the immensity of the problem. Development is a social process and the appropriate strategy is in terms of social planning comprising education, health, social security, human environment income distribution, working and living conditions of labour etc. Proper diagnosis and appropriate prescription naturally lead to a cure to a large extent. Interrelationship between social and economic development strategies of economic administration, appraisal of projects, critical micro studies and macro understanding of the landscape are some of the exercises for the planning machinery to examine.

In the discussion that followed it was pointed out that while there is an expenditure of Rs. 2,500/- crores for defence, the allotment for educations in the country was only Rs. 2,300 crores. The major part of expenditure in education is for higher education with only 30 per cent for primary education. It is also seen that there is somewhere about 60 per cent of drop outs in the state in elementary education which is a factor that needs corrective measures. However, the percentage of enrolment at all levels

in the school education has increased considerably during the years. Drop-outs are principally due to socio-economic conditions. There are also what may be termed as psychological pushouts as the pupils from the lower strata of society feel unequal to the pupils of the elite class. In one teacher schools there appears to be much waste of time. The resources for education have to be utilised in a better way to ensure better attendance and education. The new plan proposes higher allotment for elementary education reducing that for higher education. An opinion was expressed that for the attainment of the two objectives of development of human resources stated in the paper, the content and method of education now prevalent have to receive new orientation. An effort has to be made to wipe out superstition in rural areas and to make available to the people simple health principles like boiling of water for drinking. The services of the radio and television could be used in this regard. The development of skills by providing educational facilities is to be emphasised. At present while there are thousands of applicants for a clerical post, it is difficult to find a carpenter. In this connection it was suggested that social attitudes should change because at present the tendency appears to be that one is prepared to be an educated unemployed than an earning carpenter or brick layer. On the broader issues of planning and policy formation, the efforts are all from planning and administrative authorities while there is no initiative from the people concerned. At present, there is a drive towards adult literacy and non-formal education. But even these are not linked to development of skills. It was pointed out in this connection that some missionary organisations in the country have been successful in this field. The Gandhigram educational organisation has also been providing such facilities. Cuba, Vietnam and Sri Lanka were cited as outstanding examples of developing countries where a high degree of literacy has been achieved. It was suggested that we should have some broad social policies including an employment policy around which education, health services etc can be planned and implemented. Such policies have not been drawn up as yet. The question regarding family planning in the overall policy of health and medical services was also raised. The projected idea of independent Radio stations in the country was mentioned and it was observed that these facilities could be used for literacy and health education.

Some Economic Facets of Social Justice*

By

MALCOLM S. ADISESHIAH

Introduction

I must begin with expressing my thanks to the Dr Zakir Husain Educational and Cultural Foundation for inviting me to participate in this series of lectures on Social Justice and Democratic Polity. The subject of the lecture series is appropriate to the life and ideals of that great fellow Indian that the Foundation commemorates. Dr Zakir Husain demonstrated in his person and gave his life to defining for us, a multi cultural mass of people steeped in ignorence and poverty, the condition for democratic living and a system of social justice on which such a polity can be realised. It is appropriate that we attempt a balance sheet of where we stand in regard to this humanistic call which he sounded, a call derived from his own cultural background and denied by the society in which he lived and which he loved and served.

In this lecture, I shall deal with three of the many economic facets of Social Justice—the content facet, the measurement facet and the application facet.

Content

The content of social justice that the economist deals with consists of distribution–between groups, called classes, of (a)the national income and (b) the ownership of the means of production which determines the size and composition of the national income. If the national income is distributed equally or equitably among each individual in the country, which in turn would mean the means of producing that income belongs to no controlling group or class in the country but is owned collectively, there would be social justice. India's national income today is Rs. 65,000 crores and its equal distribution among its people would mean a per capita income, a statistic with which we are all familiar, of Rs. 1,050 for every Indian citizen. There was something of this social justice content in the early years of our independence when the 1948 Industrial Policy Resolution declared "a dynamic national policy must therefore be directed to a continuous increase in production by all means, side by side with measures to secure its equitable distribution." The link between such equitable distribution of the national income which would require

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that the means and instruments of production should not be owned by some groups in society which would give them a larger inequitable share of the national income, both as payment for their ownership and as income from producing goods and services not as needed by the people as a whole but by those who have the resources to buy them, was seen even earlier by the pre independence 1938 Congress National Planning Committee when it declared: "No rights of property or inheritance in any form of National Wealth e.g., land, mines, forests should be allowed. The ultimate property in these forms of wealth must vest in the people collectively ...... All cultivation should, ordinarily be in common, and according to the particular plan applying to each unit ..... Industries which are under private ownership, but which are or become of national importance, owing to the scale of their operations, the labour employed, the nature of the commodities or services supplied or for any other reason connected with the local or foreign trade of the country, its credit or finance must be put under rigid control by the States. New industries......all key industries must be state owned and state managed... Foreign trade must be completely nationalised."

Today some 4 decades after these declarations and as a result of nearly three decades of Five Year Plans, as our Draft Plan 1978-83 points out not only are our most cherished social justice goals, which the Draft Plan defines as the achievement of full employment, the eradication of poverty and the creation of a more equal society as distant as they were before independence, our actual distribution profile seems to be moving in opposition to our proclaimed decisions. In place of moving towards equal or equitable distribution of our National income, the actual distribution is such that the lowest income groups, who are the bottom 20 per cent of our people account for 9.5 per cent of our total national consumption in the rural areas and 9.25 per cent in the urban areas, while the highest 20 per cent income earners account for 38 per cent of total consumption in the rural and 40 per cent in the urban areas. The Draft Plan estimates that today 290 million out of our 600 million people are living in poverty, while 120 million are living in affluence. As for ownership of the means of production, the All India Agricultural census reports that 4 per cent of rural households own 30 per cent of cultivated lands and 10 per cent own 60 per cent of the sown area, and the Southern Economist computes that 75 houses own 53 per cent of assets in the corporate sector.

The Draft Plan points rather vividly to the worsening of the ownership distribution of our means of production and the inter related effect of dividing our people into a rich minority and a poor majority; our land reform measures, it states, have had no visible impact on the distribution of rural property because, among other causes, the officially established surplus lands are only a fraction of the areas held in large ownership holdings: and our pattern of industrial development, it concludes has made for further concentration of economic power in the hands of a few, whose incomes decide the production and marketing of goods and services in demand by that group. When it refers to even the fruits of government investment in social infrastructures, such as in education, urban development, housing, etc., as well as the benefits of the development of

banking, insurance and commercial services accruing to the small - well to do classes in the urban and rural areas, leaving the vast majority of people untouched, it is in effect referring to the nature of our democratic polity which has brought about a continuous rise in prices over the last 3 decades, which together with the system of state subsidies, taxes, borrowing and lending, has been a major means of effectuating the kind of property distribution and assets ownership referred to earlier. That is, the distribution of ownership of the means of production not only determines the content of the national production basket and the price structure, the price structure in turn makes for the unequal distribution of assets and property in the country.

One significant exemplar of this has been pointed out by one of our economists, which I shall refer to in passing. Contrary to the popular belief that the urban sector is exploiting the rural sector, which is true in disaggregative terms, that is, in term of the non assets owning rural majority, as far as the relationship between the agricultural and manufacturing sectors is concerned, taking the period 1961-62 to 1973-74, the official food grains index is seen to have increased from 100 to 400.7, while the official manufactures price index has moved from 100 to 254.7. This over 50 per cent movement in favour of agriculture as against industry was not due to differing rates of supply growth of the two sectors, because in the last five years of that period food output increased by 25 per cent while industrial output increased by only 20 per cent, so that relative short supplies of manufacturing sector should have moved the relationship in favour of manufacturing industry. Agriculture's favourable position* vis a vis manufactures was due to the pricing and incentives pattern—the state's support and procurement prices and the various special incentives and subsidies through which water, high yielding varieties of seeds, fertilisers, pesticides and credit have been made available to it—all or most of which were appropriated by the large farmers, whom we call the progressive farmers, and traders. It is true as noted earlier that the large farmers are less than 10 per cent of the farming households, but farm prices like all prices, are determined at the margin, and by the location and timing of the release or witholding of food grain stocks which are decided by the large farmers and traders. The nature of our democratic polity which brings about this kind of distributional social injustice needs attention, a subject, however, which I am not dealing with in this lecture.

Measurement

In the discussion of the content of social justice, the distribution of national income and ownership of assets, I have employed various empirical measurements. Some comment may be made on the measuring devices used by economists in this area of social justice.

Economic literature shows some serious concern with the measurement of the status of distribution in any given situation. One group of the measuring means used is statistical in nature, wherein the extent of inequalities in incomes is measured: the other set of measuring indices relate to welfare or other norms which aim at maximising the well being of everyone and the total utility of society in accordance with the norm.

The statistical tools used for measuring the status of equality or inequality of incomes are the usual and known tools *of variance, the* coefficient of variation and the Gini coefficient of the Lorenz curve, the last of which is used most *widely to measure* the extent of social injustice of various forms in our society. The Lorenz curve measures the deviation *from perfect* equality of incomes in a society (shown by a diagonal in a box diagram or unit square) and the actual *income distribution (shown by a sloping* curve moving up with increasing income groups). The Gini coefficient is the *ratio between the area enclosed by the* Lorenz curve and the diagonal representing the line of absolute equality. It is a measure of the concentration of income in some classes. In the Indian economy the Gini ratio during the decade 1960-1970 fluctuated between 0.3 and 0.4 in the rural areas and remained constant at 0.4 in urban areas, indicating that income inequality is greater in the urban than in the rural areas, and that the developments during the decade did not alter the inequality thus measured.

As noted earlier, this Gini coefficient of the Lorenz curve is but one of several rather precise statistical devices for measuring the nature and extent of social injustice, of inequalities of incomes in a country. There is need for such measuring devices in order that in a poor country like ours, we know precisely the extent of social injustice and inequalities that are both holding back production growth and contradicting and moving away from the social justice goals that we have set ourselves. From this point of view the technical task of developing, perfecting and using the statistical measuring rods of our inequalities is important, and needs public and academic support. The danger and hence the limitation of these statistical measurements of social and economic inequalities is that they become elegant arithmetical analysis and equations in themselves and there is the ever present danger that both the author and the reader would get lost in the technical virtuousity of the theory and its quantitative expression, rather as in cases where symmetry is equated with equality, which it is not, as there can be economically a perfectly symmetric system which is in terms of *distribution an unequal one.* Even more serious with perfecting these statistical and mathematical means of *measuring social injustice and income* inequality, there seem to be no time left for and no tools appropriate to enquiring into the causes of these inequalities and the remedial action proposed. The inequalities measured by the Gini coefficient in our economy are usually inequalities in consumption expenditures: we still do not have similar information on income and even less on the ownership of assets. (On the surplus lands available for distribution under our ceiling legislation there are three official estimates—that of the union ministry of Agriculture which is 4.2 million acres, that of the Planning Commission which is 22 million acres, and that of the village records which is 45 *million acres.* As for distribution of industrial assets, there are no official periodic published data available). And so inequalities are confusingly equated with poverty, and the remedy for inequality sought in corrective action taken in regard to poverty. I need only recall that poverty is a consequence of inequality, it is itself not inequality. The Gandhian society of plain living and high thinking could be a poor society (in terms of Western industrial standards) but not one of inequality. It is only when poverty is

seen not as "lacking", *per se*, but as lacking caused by some having more, much more—than they need, while others the majority do not have enough to live as a result of the minority exploiting the majority that the search for what causes poverty begins, the measurement of the causes become even more urgent than the poverty effect, and effective remedial actions can be designed.

At this point, I wish to refer to two cases of the very precise measure of poverty defined as just 'lacking' and not primarily as an offshoot of 'inequality' in the country, which led to indequate diagnosis and/or inappropriate remedial suggestions by a group of economists in one case and by the government in the other. In the former case, the economists used nutritional norms to measure poverty over time and between classes, referred without similar analysis to inequitable distribution of the means of production as being at the root of inequities of income; ruled out the socialising of the means of production as not being feasible (because we are against communism), or desirable (because it would lead to stagnation in agriculture and as illustrated by the failure of labour intensive methods as in the Khadi and Village Industries sector in industry), and proposed relieving poverty by providing the poor with additional employment worth Rs. 800 crores to Rs. 1,000 crores per annum, ending with an appeal to the top 20 per cent (the richest) to reduce their expenditure by about 15 per cent to finance this additional employment expenditure. The Draft Fifth Plan made a similar approach. After the same kind of measure of poverty, it produced several (24) production models, of which one (called 3 D) reduced the consumption of the top 5 per cent by 15 per cent and transferred the saved resources to the bottom 30 per cent. In this case, apart from using probably the state's fiscal powers, what sweetened the pill of the proposed resource transfers from the rich to the poor was that (a) the rate of growth of the economy even under this model would be 5.5 per cent which was the optimum aimed at, and (b) the absolute income of the rich would increase (because of the increasing ratio of savings to income). The diagnosis was superficial in that it attempted to deal with the physical lacks called poverty, and the remedies put forth, namely massive public works or straight resource transfers based on public spiritedness or use of fiscal instruments were non starters.

The other measurement of social justice and distributional equality is in terms of a norm of social welfare or needs or work results.

The measuring of the equality facets of social justice in terms of social welfare has had a rather chequered history. Curiously, the most well known proponent of welfare economics, Pareto and his followers gave us tools to compute in what way a state of equilibrium in distribution can exist where there does not exist any change possibility whereby some one can be better of without making any one worse off. This position where no one can be made better off without making some one worse off is called the point of Pareto optimality. The elegance of its theoretical construct is matched only by its social aridity, as it can never point to a better or worse distributional status and prides itself on eschewing all value judgements. The Draft Fifth Plan change proposed as referred to earlier, to transfer 15 per cent of consumption

resources from the top 0.5 decile to the bottom 3 deciles would be described as a move away from Pareto optimality because it would be making the poor better off but at the cost of the rich. In fact, there is a kind of blessing of the distributive status quo in the concept of Pareto optimality, which has led to social welfare formulations that examine and analyse various alternative distributional systems as social welfare functions and help make distributive policy judgements with regard to them. Yet another formulation is concerned with maximising the total of individual utilties derived from the income distribution between them, through equalising each individuals utility at the margin, and on the assumption that every one has the same utility function (which is not true as with a monthly income of Rs. 1,000, as an abstemious man can get more utility than my alcholic friend earning a similar Rs. 1,000 per month), and equating marginal utilities which results in equating total utilities. If the assumption of uniform utility schedules for all is true, then the corollary is that to maximise social welfare (utility), there should be equal distribution of incomes. Unfortunately this basic assumption of uniform utility schedules, as noted earlier, is not true. All together, the use of welfare norms as measuring rods of distributional equality does not yield us much result in this discussion of social justice.

The other set of normative measurements is related to income distributions based on needs and/or work results. In the final stages of the communist society, which no existing communist state has as yet attained, the production and distribution principle, according to Marx, will be "from each according to his ability, to each according to his needs." This conclusion he derives from the argument which precedes that principle in the following terms : "In a higher phase of communist society, after enslaving subordination of the individual to the division of labour, and there with also the anti thesis between mental and physical labour has vanished; after labour has become not only a means of life but life's prime want; after the productive forces have also increased with the all round development of the individual, and all the springs of wealth flow more abundently", then the principle will become operative. Here are two models of social justice, one distribution based on work result—what Marx calls "the enslaving subordination of the individual to the division of labour", and the other a distribution system based on needs. Both could result in equal income distribution, provided that the market where the prices, which are the incomes distributed, does not face supply shortages on the one hand and has as a backdrop support complete equality of educational and training opportunities and outcomes and there are no rental payments for exceptional ability. These conditions do not exist anywhere, not even in the present communist societies with the exception of the Chinese communes, perhaps, and so there are differences in income distribution based on differing rewards and incentive payments for work results. In the Chinese communes which represent an attempt to get away from wage payments, that is payment according to work results and the surplus value added that it creates, distribution is based on non-work criteria which include the needs of the individual and the family. From the stand point of social justice, particularly in economies like ours with large massive surplus manpower, a distributive system based

on such non-material incentives is the optimum that we should recognise.

Application

In applying this analysis of social justice involving an equitable distribution of income to our condition in India, the first moral to be drawn is the urgency of socialising the means of production. Our Draft Plan, as noted earlier, describes vividly the failures of our five Year Plans, but does not face the fact that the three fold objectives of the current plan faces the same constraints as the earlier ones did, in that those who own and or control the major part of the country's productive assets, and dispose of and decide on our investments and the nature and content of the national basket of consumption goods that are produced, are naturally not motivated by the desire to remove unemployment and underemployment, to bring about an appreciable rise in the standard of living of the poorest through the provision of the basic needs of the people, and to create a more equal society. Their objective is to increase their profits, incomes and investments. This economic system of private ownership of productive assets has to be replaced by social ownership and control of those assets, if the Plan objective of social justice is to be realised—as visualised and pledged in our pre independence days.

A second moral is that within the existing unjust system, some of the more glaring facets of social injustices can be held back from worsening, by erecting some kind of dykes (a) against continuing the production of the national basket of consumers goods and services for the benefit and consumption of the higher income groups and as a corrollary (b) through mobilising the people to produce the goods that they need. These dykes could be (i) a massive food for work programme aimed at not only establishment of productive assets but production of the goods and services by and for the masses of the people, (ii) the SFDA, DPAP and Hill areas development programmes provided they really reach down to the small farmers, the marginal farmers, the agricultural labourers and the tribals who form 50 per cent of the poor, (iii) the tiny, cottage and household industries, and (iv) a restructuring of the system of taxes, price support, subsidies and incentives which feed the present unequal pattern of agricultural and industrial production.

A third moral again within the existing socially unjust system is to give effect to the innovative provisions in the section called Distributive Justice in our Draft Plan, ranging from land reform, dispersal of urban and corporate property, the expanded public distribution system, fiscal measures, an income policy (on which instead of setting up further committees and commissions, a start could be made in giving effect to the 1938 Congress National Planning Committee decision to the effect that the ultimate irremovable gulf between

the lowest and highest individual income should not be greater than 1:10", on to the unusual and the explosive provision concerning the organisation of the poor, which would be a significant step in people themselves fighting against all current forms of social injustice and for social justice, as they see and experience them.

The question with which I end this discourse is whether our existing political structures and power net works provide the democratic base for such a democratic polity, infused with the unrelenting motivation to fight against Social Injustice and move on to a system of Social Justice which is set forth in my first concluding moral.